MINISTRY OF ENVIRONMENT 2003-2004 ANNUAL REPORT

Alberta

leadership foundation
making a difference citizens
continuous learning air
natural environment future
integrity conservation
working together education
quality of life commitment
shared responsibility
partnerships success water
standards trust innovation
ethical respect practices
communities green power
informed knowledge
recycle achievement legacy

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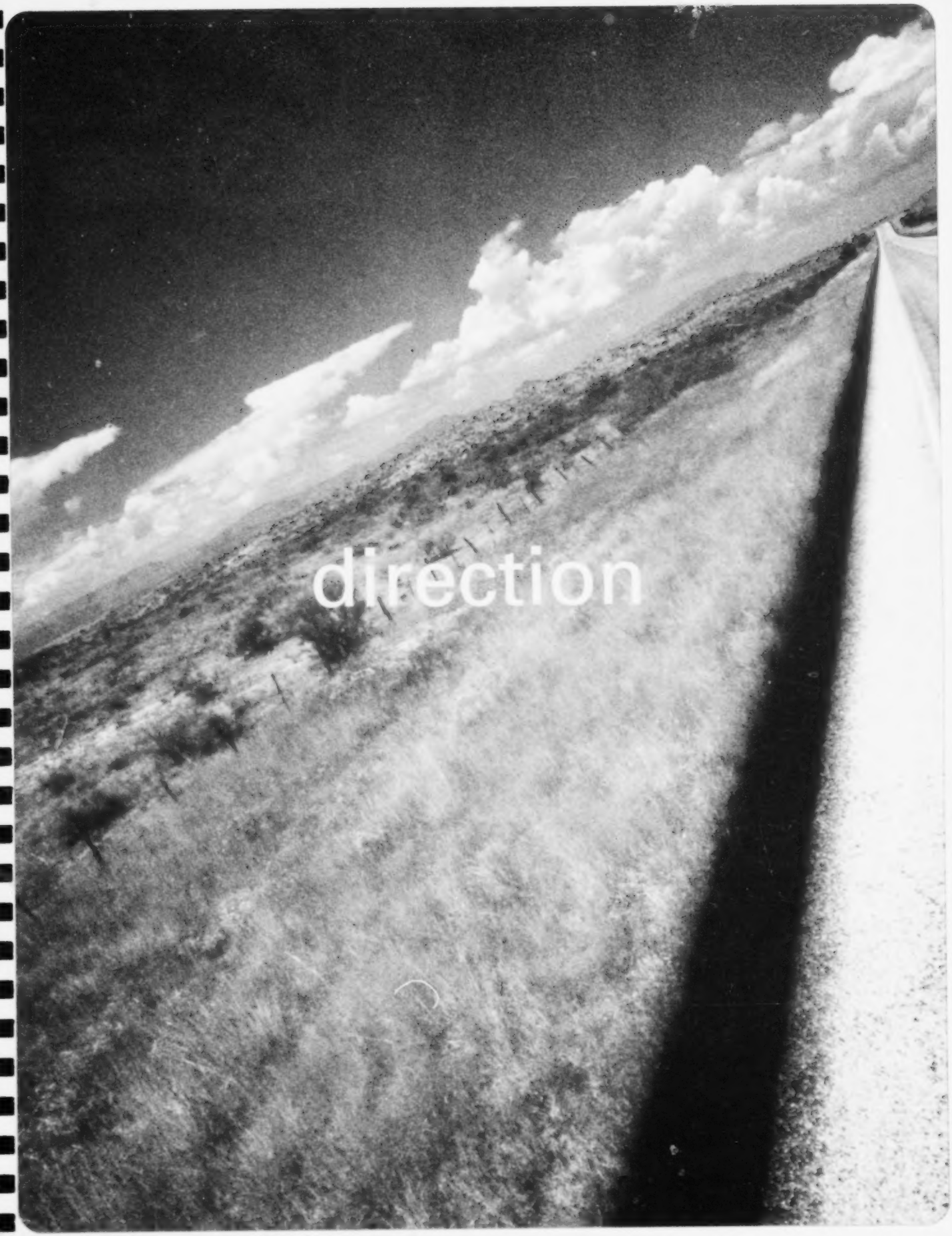
direction

leading the way

preface

The Public Accounts of Alberta are prepared in accordance with the *Financial Administration Act* and the *Government Accountability Act*. The Public Accounts consist of the annual report of the Government of Alberta and the annual reports of each of the 24 Ministries.

The annual report of the Government of Alberta released June 29, 2004 contains the Minister of Finance's accountability statement, the consolidated financial statements of the Province and a comparison of the actual performance results to desired results set out in the government's business plan, including the *Measuring Up* report.

This annual report of the Ministry of Environment contains the Minister's accountability statement, the audited financial statements of the Ministry and a comparison of actual performance results to desired results set out in the ministry business plan. This Ministry annual report also includes:

- The financial statements of entities making up the Ministry, including the Department of Environment, for which the Minister is responsible;
- Other financial information as required by the *Financial Administration Act* and *Government Accountability Act*, either as separate reports or as part of the financial statements, to the extent that the Ministry has anything to report.

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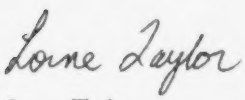
clean

minister's accountability statement

The Ministry's Annual Report for the year ended March 31, 2004, was prepared under my direction in accordance with the *Government Accountability Act* and the government's accounting policies. All of the government's policy decisions as at September 3, 2004 with material economic or fiscal implications of which I am aware have been considered in the preparation of this report.



Lorne Taylor
Minister of Environment

message from the minister

In 2003-2004, Alberta Environment continued its work to ensure Albertans enjoyed a high quality of life through the protection and management of water, land, air and climate. Once again, the ministry reinforced its position as a leader on water issues, releasing *Water for Life: Alberta's Strategy for Sustainability* on November 27, 2003. The most comprehensive strategy of its kind in Canada, *Water for Life* is based on more than 18 months of consultations and discussions with Albertans and water experts. The strategy outlines a series of actions aimed at ensuring Albertans have safe, secure drinking water, healthy aquatic ecosystems and a reliable water supply to support provincial economic development. The strategy focuses on three core areas:

- Knowledge and research – includes scientific knowledge of surface and ground water, understanding emerging issues and education and awareness to provide the knowledge and tools for action
- Partnerships – includes formalizing partnerships at the provincial, regional and community level and recognizing watershed management and stewardship as shared responsibilities
- Water conservation – focuses on using water effectively and efficiently, and emphasizes the need to improve water use productivity and find effective ways to manage demand and supply issues.

The ministry also affirmed its leadership role by introducing legislation that provides the framework for implementing Alberta's action plan on climate change. The *Climate Change and Emissions Management Act* was passed in the Legislature during the 2003 fall session. The Act strengthens and complements Alberta's existing legislation on environmental protection and resource management related to greenhouse gas emissions by providing for:

- An overall emission target for Alberta and targets for specific sectors of the province's economy that will be established by negotiated agreements
- A tool kit of options to facilitate sectoral agreements and to focus on cost-effective reductions in Alberta
- A framework for how emissions offsets will be worked into Alberta's regulatory requirements.

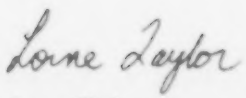
In addition to these environmental initiatives, Alberta Environment launched other endeavors in 2003-2004 to improve the effectiveness of the ministry's efforts. These include:

- Consultation with approximately 120 stakeholder organizations on electronics waste recycling
- Removal of more than 90 tonnes of potentially hazardous crop protection products from Alberta land during Operation CleanFarm
- The *Environmental Protection and Enhancement Amendment Act*, which improves the ministry's regulatory process by:
  - Strengthening Alberta Environment's ability to adopt and enforce Codes of Practice;
  - Streamlining and expanding Alberta's Upstream Oil and Gas Reclamation and Remediation Program to address both surface issues and potential contamination; and
  - Providing municipalities and industry the option to report environmental incidents electronically and giving Alberta Environment investigators immediate access to critical incident details.

- The government committed to implement recommendations made by the Clean Air Strategic Alliance (CASA) that ensure emissions of sulphur dioxide, nitrogen oxides, mercury and particulate matter will continue to be reduced over the coming decades. Adopting these regulations makes Alberta a leader in emissions standards for electricity generation in North America. Alberta Environment also co-chaired the CASA team, consisting of industry, government and non-government stakeholders.
- Formation of a Ministerial Advisory Committee as part of the *Water for Life* strategy to review the policies and practices associated with industrial activities that remove water from the active hydrologic cycle. Albertans have expressed concern with the practice of injecting water into underground oilbearing formations as a means of enhancing recovery.
- Worked with partner organizations such as the Tire Recycling Management Association, the Alberta Used Oil Management Association and the Beverage Container Management Board, to encourage Albertans to reduce their personal waste by participating in hazardous and electronic waste roundups and composting kitchen, garden and yard waste during Waste Reduction Week (October 21-28).

I would like to sincerely thank everyone who helped make the 2003-2004 fiscal year a successful one for Alberta Environment. As a ministry, we have made significant progress towards protecting, preserving and improving the environment at local, provincial, national and international levels.

We have laid a foundation for many successful years ahead, and helped secure a healthy environment and a healthy future for generations to come.



Lorne Taylor
Minister of Environment

management's responsibility for reporting

The Ministry of Environment includes the Department of Environment and the Environment Appeals Board.

The executives of the individual entities within the Ministry have the primary responsibility and accountability for the respective entities. Collectively, the executives ensure the Ministry complies with all relevant legislation, regulations and policies.

Ministry business plans, annual reports, performance results and the supporting management information are integral to the government's fiscal and business plans, annual report, quarterly reports and other financial and performance reporting.

Responsibility for the integrity and objectivity of the financial statement and performance results for the Ministry rests with the Minister of Environment. Under the direction of the Minister I oversee the preparation of the Ministry's annual report, including financial statements and performance results. The financial statements and the performance results, of necessity, include amounts that are based on estimates and judgments. The financial statements are prepared in accordance with the government's stated accounting policies.

As Deputy Minister, in addition to program responsibilities, I establish and maintain the Ministry's financial administration and reporting functions. The Ministry maintains systems of financial management and internal control which give consideration to costs, benefits, and risks that are designed to:

- provide reasonable assurance that transactions are properly authorized, executed in accordance with prescribed legislation and regulations, and properly recorded so as to maintain accountability of public money,
- provide information to manage and report on performance,
- safeguard the assets and properties of the Province under Ministry administration,
- provide Executive Council, Treasury Board, the Minister of Finance and the Minister of Environment any information needed to fulfill their responsibilities, and
- facilitate preparation of Ministry business plans and annual reports required under the *Government Accountability Act*.

In fulfilling my responsibilities for the Ministry, I have relied, as necessary, on the executive of the individual entities within the Ministry.

Ron Hicks
Deputy Minister of Environment
September 3, 2004

overview

highlights

AWARDS

In 2003-2004, the Ministry of Environment received five Premier's Awards of Excellence (PAE) and one Alberta Emerald Award for work done in partnership with other organizations. The awards include:

- Alberta Environment Air Emission Trading Project (Gold PAE)
  - The Air Emissions Trading Project was initiated to assess emission trading and make recommendations on the implementation of a multi-pollutant trading system for Alberta. The first phase of the project centered on emissions trading studies, culminating in a $250,000 major feasibility study that explored the potential for multi-pollutant emission trading in Alberta. Phase two produced recommendations on the best way to implement emission trading in Alberta, given the province's realities.
- *Water for Life: Alberta's Strategy for Sustainability* (Silver PAE)
  - The *Water for Life* strategy is the most comprehensive in Canada and is supported by a detailed action plan for implementation. It describes a new approach to water management in Alberta, emphasizing shared responsibility through partnerships within government, and between government and stakeholders and citizens. The *Water for Life* strategy process is deemed an exemplary model for policy development in government.
- Approvals Review Project (Silver PAE)
  - The Approvals Review Project team was formed to improve the efficiency and effectiveness of the department's current regulatory framework to regulate activities that impact Alberta's environment. The project team reviewed the regulatory framework, focusing on maintaining approvals for high-risk activities and moving to Codes of Practice for lower risk activities. Successes included amendments to the *Environmental Protection and Enhancement Act* and the *Water Act* as well as other practices for protecting the environment.
- Alberta Government Climate Change Project Team (Bronze PAE)
  - The team addressed the challenges of creating a climate change action plan for the province by building on solid relationships and ensuring clients and key stakeholders understood the need for a coordinated, long-term approach. The team stressed the importance of full consultation and being open to compromise, and members thought "outside the box" – a necessity, as no model existed anywhere that mirrored what Alberta hoped to achieve. The team's action plan won broad public support and it's the first of its kind in Canada and North America, by establishing an overall emissions intensity target for Alberta.
- Agriculture Operation Practices Act (AOPA) (Bronze PAE)
  - This project team, led by Alberta Agriculture, Food and Rural Development, received an award for its plan for the Alberta government to assume legislative responsibility for confined feeding operations. The project was completed on time; the legislation was tabled in the 2001 fall session of the Legislature and proclaimed on January 1, 2002. Both government and the Liberal Opposition commended the project team for their work in developing the amendments to the Act. Clients also expressed their strong support for the amendments.
- Clean Air Strategic Alliance (CASA) Electricity Project Team – Managing Electricity Generation Emissions Now and for the Future (Alberta Emerald Award)
  - With Provincial Cabinet approval, a new framework developed by the Clean Air Strategic Alliance (CASA) has placed Alberta among North American leaders for managing emissions from electricity generation and help to guide the development of national standards. Power plant emissions of mercury, sulphur dioxide (SO_2), nitrogen oxides (NOX) and primary particulate matter will be substantially reduced between 2004 and 2025 with only a small increase in electricity prices. Efforts to develop the framework began in January 2002 when the Ministry of Environment

asked CASA to use its successful multi-stakeholder, collaborative process to solve the issue. With more than 30 representatives from industry, government, and environmental, health and community organizations, CASA's electricity project team worked for nearly two years on the project, presenting its 71 recommendations to the Minister of Environment in early December 2003. In accepting the report and recommendations for the Government of Alberta, the Minister of Environment agreed to take the recommendations forward, without alteration, for formal government approval.The Provincial Cabinet accepted and adopted all of CASA's recommendations on March 4, 2004.

PERFORMANCE MEASURES

In 2003-2004, Alberta continued to enjoy a high quality environment. Air quality was good 96 per cent of the time, slightly below the 97 per cent target. Five of the six major river systems in Alberta continued to have "good" or "excellent" water quality. The exception was the Oldman River, which had "fair" water quality, primarily due to very high river flows, influenced by increased runoff and non-point source loading. Alberta Environment has introduced a new drinking water performance measure that includes water treatment plant design, operating requirements, and performance standards of regulated waterworks facilities to produce safe drinking water. This will enhance tracking and help achieve a safe, secure drinking water supply. The amount of municipal solid waste going into landfills in 2003 increased from 2002, moving away from the target. Once again Alberta's industry was successful in being well below the standard and target maximum for biochemical oxygen demand levels per tonne of pulp production. The Alberta government's greenhouse gas emissions increased slightly in 2002. The number of action plans for energy productivity improvements submitted to the National Voluntary Challenge and Registry increased significantly in 2003 compared to 2002. Alberta's greenhouse gas emissions intensity continued to decline in 2002, and declined two index points compared to 2001. With 2002 emissions intensity at 15 index points below 1990 levels, Alberta is nearly a third of the way to the 2020 target.

PROGRAMS

There are several specific program highlights in 2003-2004 that had a high impact and represent many different areas of Alberta Environment's business. They include: *Water for Life: Alberta's Strategy for Sustainability*, the *Climate Change Management* and *Emissions Act*, the air emissions management framework for the Alberta electricity sector, the air emission trading project, the particulate matter and ozone management framework for Alberta, electronics stewardship, the joint federal/provincial review hearings of Shell Jackpine and CNRL Horizon oil sands projects: Fort McMurray, and the healthy workplace strategy.

WATER FOR LIFE: ALBERTA'S STRATEGY FOR SUSTAINABILITY

Alberta Environment led a cross-ministry initiative to develop a provincial water strategy called *Water for Life: Alberta's Strategy for Sustainability*. In November 2003, this comprehensive strategy was released after almost two years of extensive public consultation. The resulting *Water for Life* is the most comprehensive strategy in the country and is supported by a detailed action plan for implementation. The strategy describes a new approach to water management in the province that emphasizes shared responsibility through partnerships within government and between government and stakeholders and citizens. The strategy also describes a place-based approach to watershed management and planning that requires and empowers communities to set priorities and implement actions locally and regionally. The *Water For Life* strategy has three key goals, or outcomes:

- Safe, secure drinking water supply
- Healthy aquatic ecosystems
- Reliable, quality water supplies for a sustainable economy.

A copy of the *Water for Life* strategy can be found at www.waterforlife.gov.ab.ca.

CLIMATE CHANGE AND EMISSIONS MANAGEMENT ACT

Alberta is the first jurisdiction in Canada with climate change-specific legislation. The *Climate Change and Emissions Management Act* provides legal backing for implementing the province's climate change action plan, *Albertans & Climate Change: Taking Action.*

AIR EMISSIONS MANAGEMENT FRAMEWORK FOR THE ALBERTA ELECTRICITY SECTOR

In November 2003, the Clean Air Strategic Alliance (CASA) submitted *An Emissions Management Framework for the Alberta Electricity Sector Report to Stakeholders* to the Minister of Environment. The framework was developed over two years by the CASA Electricity Project Team, which included members from government, industry, and non-government organizations including environmental and health associations as well as community action groups.

The framework's 71 consensus-based recommendations collectively represent a long-term and comprehensive approach to managing air emissions from Alberta's electricity sector, which consists largely of coal and gas-fired generation units. The framework focuses on mercury, nitrogen dioxide, sulphur dioxide, particulate matter and greenhouse gases. Implementation of the framework will result in significant emission reductions over time.

The Government of Alberta accepted CASA's recommendations in March 2004 and implementation is underway. Adoption of the framework effectively makes Alberta a North American leader in reducing emissions related to electricity generation.

AIR EMISSION TRADING PROJECT

In May 2002, Alberta Environment initiated the Air Emission Trading Project to explore the potential for establishing air emissions trading in Alberta for the management of nitrous oxides, sulphur oxides, volatile organic compounds, particulate matter and greenhouse gases. This work was conducted in two phases:

- Phase One was completed in May 2003, and consisted of a variety of studies that indicated emissions trading in Alberta is technically feasible for nitrous and sulphur oxides, and greenhouse gases.
- Phase Two was completed in December 2003 and consisted of predominantly internal work to identify the most prospective path for emission trading, given Alberta's regulatory, emission management and air quality realities. The project team assessed the findings from Phase One and the feedback received from stakeholders. Currently, ministry emission trading work is focused on the implementation of the CASA Electricity Project Team emission trading recommendations and the exploration of other opportunities to apply the emissions trading tool.

PARTICULATE MATTER AND OZONE MANAGEMENT FRAMEWORK FOR ALBERTA

In September 2003, the CASA Board accepted the recommendations of a multi-stakeholder team, co-chaired by Alberta Environment, for a framework on the management of fine particulate matter ($PM_{2.5}$) and ground level ozone, the two primary contributors to smog. The Framework provides mechanisms for government, industry and citizens to proactively manage air quality to ensure Alberta continues to meet its commitments to the Canadian Council of Ministers of the Environment on Canada-wide Standards. Under the framework, beginning in 2004, Alberta Environment will bring together stakeholders to plan air quality management for areas of the province experiencing increasing levels of $PM_{2.5}$ and ozone in the air.

ELECTRONICS STEWARDSHIP

In November and December 2003, Alberta Environment held a series of stakeholder workshops and public surveys related to the development of a provincial electronics stewardship program, similar to those programs already in existence for tires, used oil products, and beverage containers. Participants reviewed an electronics program proposal and supplied their feedback. Stakeholder support for a provincial program was extensive and broad-based. Following consultation, a formal program proposal was submitted for government review. In March 2004, the government approved a province-wide electronics recycling program. The program will come into effect October 1, 2004.

JOINT FEDERAL/PROVINCIAL REVIEW HEARINGS OF SHELL JACKPINE AND CNRL HORIZON OIL SANDS PROJECTS: FORT MCMURRAY

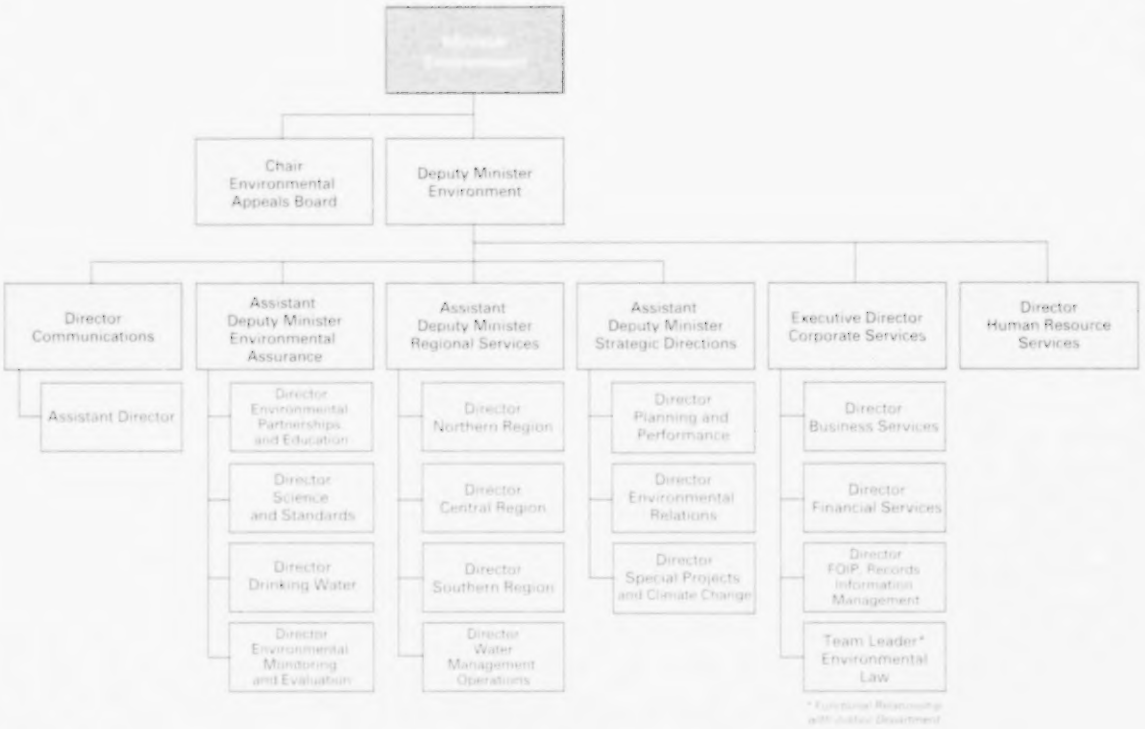
Alberta Environment chaired the government panel at the joint federal/provincial Energy and Utilities Board and Canadian Environmental Assessment Agency hearings for the CNRL Horizon and Shell Jackpine oil sands projects in the fall of 2003. The purpose of the regulatory hearings were to assess the environmental and socioeconomic impacts of construction and operation of these oil sands mining projects in the Fort McMurray area, and to determine if these projects were in the public interest. The government panel also included representation from Sustainable Resource Development and Health and Wellness, and effectively presented information at the hearings. Other participants recognized Alberta Environment as playing a valuable role at the hearings. Joint panel decision reports were issued in early 2004, approving the projects.

HEALTHY WORKPLACE STRATEGY

Through a series of workshops in spring 2003, Alberta Environment staff identified nine broad areas for enhancement to ensure a healthy work environment in the ministry. In September 2003, a Healthy Workplace Advisory Committee was formed to make recommendations for enhancing workplace health. Priorities included flexible work arrangements, physical working conditions, communication and informal staff recognition. In support of these recommendations, the Healthy Workplace Strategy was launched in October 2003. Strategy initiatives include: focusing on formal and informal recognition of staff, implementing alternative work scheduling options, partnering with Alberta Human Resources and Employment to offer the Leadership Program for employees in all positions, enhancing the frequency and variety of internal communication, and improving office space and equipment.

FINANCES

Ministry expenses in 2003-2004 were $122.3 million, $1.3 million higher than the budget of $121.0 million. This is largely due to provisions being made under Statutory Programs for future liabilities of the Ministry. Revenue was $5.6 million, which was $3.6 million lower than budgeted. Lower revenues resulted primarily from the deferral of specific reclamation activities to 2005-2006.



Alberta Environment

Vision

Alberta's environment sustains a high quality of life.

Mission

Steward the use of and ensure the protection of our diverse environment to sustain natural ecosystems, healthy Albertans, strong communities and a prosperous economy.

Alberta Environment
Main Floor, Petroleum Plaza South Tower
9915-108 Street
Edmonton, AB T5K 2G8
Tel: (780) 427-2700 (Toll free by first dialing 310-0000)
Fax: (780) 427-4407

Environmental Appeals Board

Vision

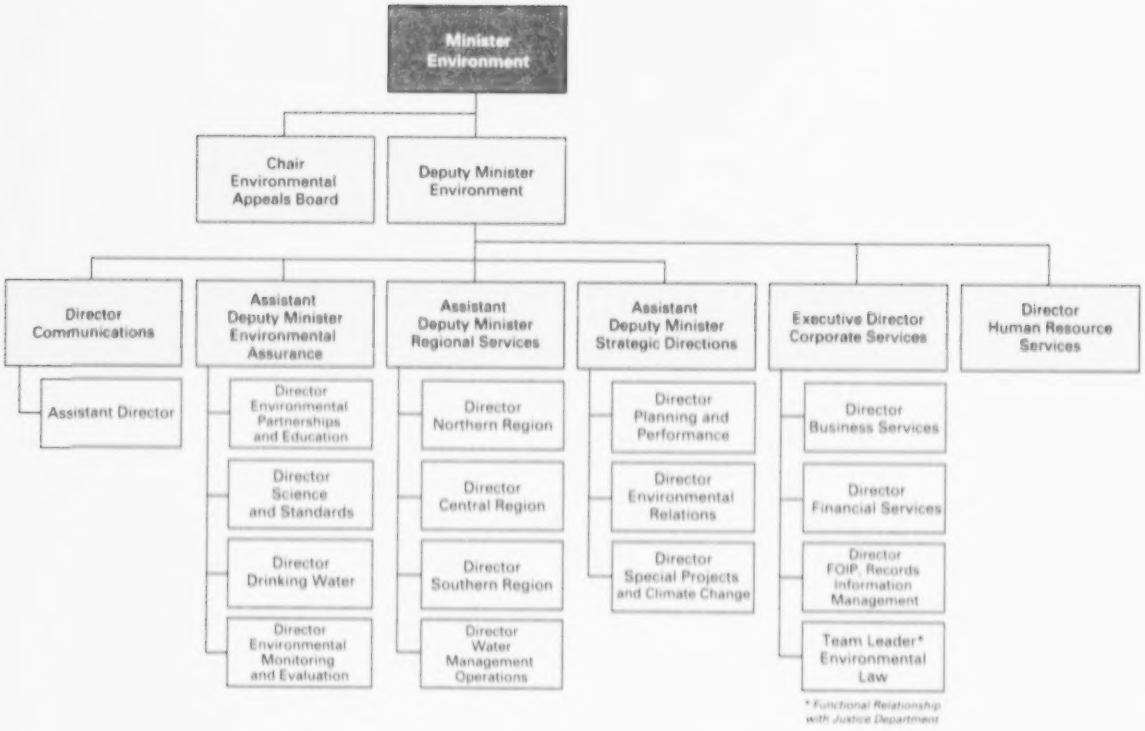
Promote a high quality of life in Alberta through the timely and thorough review of environmental decisions.

Mission

The Environmental Appeals Board will advance the protection, enhancement and wise use of Alberta's environment by providing fair, impartial, and efficient resolution of all matters before it.

Environmental Appeals Board
#306, 10011-109 Street
Edmonton, AB T5J 3S8
Tel: (780) 427-6207
Fax: (780) 427-4693

ORGANIZATION CHART
MARCH 31, 2004



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an operational overview

The Ministry of Environment consists of the Department of Environment ("Alberta Environment") and the Environmental Appeals Board.

The Minister of Environment is responsible for the Environmental Appeals Board. This Board operates at arm's length from the Department, and reports directly to the Minister of Environment.

The Ministry's key responsibilities are mandated through the *Environmental Protection and Enhancement Act* and the *Water Act*.

Alberta Environment oversees policies and initiatives associated with air quality, water management, waste management and climate change. The Department manages the provincial environmental review process and coordinates public education on conservation and environmental protection. Alberta Environment is also responsible for environmental monitoring and compliance programs related to enforcing Alberta's environmental legislation and regulations.

Alberta Environment's four core businesses in 2003-2004 were: Environmental Leadership, Environmental Assurance, Environmental Stewardship, and Hazard and Risk Management.

The Department is organized into three main divisions: Environmental Assurance, Regional Services, and Strategic Directions. These groups are supported by Corporate Services, Communications, and Human Resources.

Over the last year, our performance was strongly influenced by our commitment to working with others. The ministry's accomplishments in 2003-2004 were a collaborative effort with citizens, communities, industry and governments to achieve shared environmental goals. As environmental challenges continue to grow, there is a clear understanding that sustainable environmental management is everyone's business. Albertans are committed to protecting and sustaining:

- A clean and healthy environment
- A strong economy
- Self-reliant communities

Alberta Environment prides itself on being an environmental steward and encouraging that leadership in all Albertans. It encourages an environmentally educated society – from family homes to grade school classes, to institutions and communities, to all our industries and commerce.

the department

ENVIRONMENTAL ASSURANCE (EA)

Peter Watson, Assistant Deputy Minister
Telephone: (780) 427-6247

Environmental Assurance leads the ministry in developing standards, approaches to foster collaboration in environmental matters, and the validation and assurance of results. These include: science-based policy standards and guidelines; environmental monitoring and reporting; and public education and stakeholder partnerships to assist shared responsibility.

REGIONAL SERVICES (RS)

Paul Pellis, Assistant Deputy Minister
Telephone: (780) 427-1990

Regional Services provides front-line delivery of environmental services across the province through three regional teams and a provincial water management operations team. This structure enhances the ability to develop and manage the province's numerous programs, with support from the community. Operational responsibilities of the Northern, Central, and Southern regions include environmental approvals, environmental compliance and environmental management. Water Management Operations is responsible for the operation and maintenance of provincially owned water management infrastructure and the administration of the Canal and Dam Safety Regulations under the *Water Act* across all three regions in the province.

STRATEGIC DIRECTIONS (SD)

John Donner, Assistant Deputy Minister
Telephone: (780) 415-8183

Strategic Directions provides strategic leadership to the ministry in identifying, measuring and achieving desired sustainable resource and environmental outcomes. Strategic Directions brings strategic perspective and context to ministry initiatives, promotes corporate alignment and assists the ministry in building cross-governmental shared vision and shared responsibility with partners. Key functions include strategic business and operational planning, coordination of the ministry's relations with internal and external partners and stakeholders, support for departmental shifts with specific focus on the systems management approach and continuous improvement, cross-ministry policy integration, special projects and the integration of climate change into departmental operations.

CORPORATE SERVICES (CS)

Monica Norminton, Executive Director
Telephone: (780) 422-6082

Corporate Services' role is to provide leadership, advice, and support to the Ministry in areas of financial services, information technology, freedom of information and privacy, records and information management, administrative services, legal services and corporate initiatives.

COMMUNICATIONS DIVISION

Val Mellesmoen, Director
Telephone: (780) 427-6267

The Communications Division provides the department with quality, coordinated communication resources to help build open communication between the department and Albertans. The Communications Division:

- Provides comprehensive communications support to department initiatives, programs and services.
- Works in partnership with government ministries, other levels of government and community and industry organizations to communicate key events and initiatives.
- Provides strategic communications support to key department actions.
- Provides media relations counsel and serves as a spokesperson for the department on corporate issues, and assists the issues management team and department staff on issues management.

HUMAN RESOURCE SERVICES

Mary Jefferies, Director
Telephone: (780) 422-4480

Human Resource Services links people practices of Alberta Environment to the ministry's vision and mission, supports healthy people in a healthy organization, and provides leadership in human resource matters pertaining to the ministry.

The Human Resource Services group provides advice, guidance and strategic direction with respect to initiatives that affect the people working in Alberta Environment. This includes planning, coordinating and evaluating:

- Recruitment and classification initiatives
- Organization design processes
- Organization development initiatives
- Human resource planning
- Occupational health and safety initiatives
- Organizational human resource strategies

regional and local offices

NORTHERN REGION

Edmonton
#111, Twin Atria Building
4999 - 98 Avenue
Edmonton, AB T6B 2X3
Telephone: (780) 427-7617
Fax: (780) 427-7824

CENTRAL REGION

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#304, Provincial Building
4920 - 51 Street
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Telephone: (403) 340-7052
Fax: (403) 340-5022

SOUTHERN REGION

Calgary
#303 Deerfoot Square Building
2938 11 Street, N.E.
Calgary, AB T2E 7L7
Telephone: (403) 297-7880
Fax: (403) 297-6069

Water Management Operations
Second floor, Provincial Building
200 - 5 Avenue South
Lethbridge, AB T1J 4L1
Telephone: (403) 381-5300
Fax: (403) 381-5969

LOCAL OFFICES

Camrose
Dickson Dam
Edson
Fort Chipewyan
Fort Macleod
Fort McMurray
Grande Prairie
Hanna
High Level
High Prairie
Lac La Biche
Lethbridge
Medicine Hat
Oldman River Dam
Peace River
Rocky Mountain House
St. Mary Dam
Stony Plain
Swan Hills
Vulcan
Wainwright

To contact your local Alberta Environment office, call the regional office nearest you or dial 310-0000.

boards

ENVIRONMENTAL APPEALS BOARD (EAB)

Dr. William Tilleman, Q.C.
Phone: (780) 427-6207

The Environmental Appeals Board (EAB), consistent with the *Environmental Protection and Enhancement Act* and the *Water Act*, seeks to provide fair, impartial and efficient resolution of all matters before it. Its goal is to advance the protection, enhancement and wise use of Alberta's environment.

The EAB was established on September 1, 1993 under Alberta's *Environmental Protection and Enhancement Act*. The EAB hears appeals from the *Environmental Protection and Enhancement Act*, the *Water Act* and Schedule 5 of the *Government Organization Act*.

The EAB has the power to make recommendations to the Minister of Environment on matters brought before it, with the Minister making the final decision. On matters relating to requests for confidentiality, stays, costs, administrative penalties, and certain matters relating to water works, the EAB makes the final decisions. The EAB does not replace or eliminate the right of Albertans to seek judicial review in the courts consistent with common law practice.

summary of key activities in the past year

Key activities related to significant improvements in operating efficiency in 2003-2004 include Drinking Water Reporting, the Approvals Review Project, Call Centre Integration and Environmental Incident Reporting.

DRINKING WATER REPORTING

Alberta Environment's new Drinking Water Quality initiative allows operators of regulated water treatment facilities to use the Internet to provide the monthly reports that are required as part of their approval to operate in a more timely and efficient manner. Developed in partnership with operators, this initiative makes it easier for water treatment operations in the province to report to Alberta Environment, and gives Albertans access to information about water quality where they live.

This initiative supports the province's water strategy, *Water for Life: Alberta's Strategy for Sustainability*, which focuses on improving accountability and providing better access to information about drinking water quality and safety.

APPROVALS REVIEW PROJECT

Alberta Environment regulates activities through the *Environmental Protection and Enhancement Act* and the *Water Act*, using tools such as approvals and registrations. Since 1993, when the *Environmental Protection and Enhancement Act* was enacted, Alberta Environment has issued approvals having a maximum expiry date of 10 years. To address the increase in approval renewal applications beginning in 2003, the Approvals Review Project Team was formed to develop and implement options for improving the efficiency and effectiveness of Alberta Environment's regulatory framework.

The Project goal was to continue issuing approvals for activities with higher potential for environmental impact, and shift to registrations or notifications and Codes of Practice for other activities. Codes of Practice provide standard province-wide operating rules for an activity and lead to regulatory fairness and consistency. The project team consulted with stakeholders on the proposed changes through information sessions, letters, and the Internet. The clients requested the work be completed in phases due to the number of changes being proposed. Phase One of the work was completed in 2003-2004 and resulted in a reduction of over 1,000 applications to Alberta Environment over the next five years. Phase Two will be implemented in 2004-2005.

CALL CENTRE INTEGRATION

Alberta Environment integrated its Environmental Call Centre with Alberta Transportation's Coordination Information Centre towards improving client service and streamlining reports of environmental, transportation or utility incidents. The consolidated call centre, which operates on a 24-hour 7-day basis, allows Alberta's public and industry to call a common centre for Alberta Environment, Natural Resources Conservation Board, and Alberta Transportation. The integrated center went "live" on April 1, 2004.

ENVIRONMENTAL INCIDENT REPORTING

Alberta Environment's new online system makes reporting environmental incidents, such as releases and spills, as easy as pushing a button through the Internet Incident Reporting System. Alberta Environment currently requires both an immediate verbal report (by telephone to 1-800-222-6514 or in person to Alberta Environment) and a follow up written report within seven days following any incident that could impact the environment. Developed in partnership with stakeholders, the Internet Incident Reporting System allows registered regulated parties to submit immediate reports electronically, giving Alberta Environment investigators immediate access to critical incident details.

Other advantages of electronic reporting include:

- Greater consistency between immediate and followup reports
- Immediate acknowledgement that mandatory incident reports have been filed and received by Alberta Environment
- Automated updating of reported information into Alberta Environment's incident-tracking database.

There were several legislative changes in 2003-2004. The *Environmental Protection and Enhancement Act* was amended to facilitate development and use of codes of practice, to implement changes to the reclamation and remediation program for the upstream oil and gas industry, and to implement electronic reporting of substance releases. Several regulations were amended to support these changes. The *Climate Change and Emissions Management Act* was passed but has not yet been proclaimed. The Act supports implementation of Alberta's Action Plan on climate change. Several Acts were amended to change the name of the Environmental Appeal Board to the Environmental Appeals Board and to reflect the responsibility of the Board to hear issues related to both the *Environmental Protection and Enhancement Act* and the *Water Act*.

Major policy changes in 2003-2004 include the Upstream Oil and Gas Reclamation and Remediation Program and the Emergency Preparedness Plans (EPP)/Emergency Response Plans (ERP).

UPSTREAM OIL AND GAS RECLAMATION AND REMEDIATION PROGRAM

Over the last year, Alberta Environment has consulted with landowners, industry and other affected stakeholders to identify how the Upstream Oil and Gas Reclamation Program could be improved. As a result, on October 1, 2003, Alberta Environment expanded the program to include specific requirements for the assessment and remediation of contamination. The program applies to all upstream oil and gas facilities including well sites, batteries and pipelines on private and public land. Alberta Environment is continuing to work with stakeholders to implement the program changes.

Alberta Environment is committed to continuous improvement of its processes and policies. The new Upstream Oil and Gas Reclamation and Remediation Program will be reviewed annually to ensure opportunities for improvement are identified and addressed.

EMERGENCY PREPAREDNESS PLANS (EPP)/EMERGENCY RESPONSE PLANS (ERP)

During this past year, Alberta Environment promoted the safe operation of dams through the development and adoption of new EPP/ERP guidelines for private and public dams in Alberta. These plans defined notification processes, roles and responsibilities of dam owners and downstream responders (i.e. local authorities) to ensure a coordinated response in the event of structural emergencies or major flood events. This initiative further demonstrates the department's successful partnership efforts with stakeholders and local authorities towards promoting public safety and awareness. Two workshops were held with dam owners to introduce and explain the new guidelines, which dam owners are now implementing.

INTEGRATED RESOURCE MANAGEMENT: NORTHERN EAST SLOPES (NES)

A major consultative process in 2003-2004 was the Integrated Resource Management: Northern East Slopes (NES) strategy.

In May 2003, the multi-stakeholder Regional Steering Group for a Northern East Slopes Sustainable Resource and Environmental Management Strategy presented its report to the Minister of Environment. This report outlines strategic directions and actions to support increased awareness and implementation of integrated resource management principles in this region. The Regional Steering Group, which was comprised of representatives from industry, non-governmental organizations and all orders of government, identified the following four strategic themes that collectively help frame the strategic directions required to achieve the vision set out for this region:

- Wise Use of the Land
- Economic Sustainability
- Conservation of Biodiversity
- Air, Water and Soil Conservation

New significant partnering initiatives in 2003-2004 included the Bow River Irrigation District Agreement and the EPCOR Remote Monitoring Program.

BOW RIVER IRRIGATION DISTRICT AGREEMENT

Early in the year, Alberta Environment entered into a one-year renewable agreement with the Bow River Irrigation District (BRID) to contract out routine operation and maintenance of the Carseland Bow River Headworks System. The success of this partnership had allowed the department to reallocate resources while benefiting from the operation and maintenance expertise of the BRID. Both parties are in the process of entering into a five year agreement. The new long-term agreement will allow BRID to better plan its resources while continuing to directly serve its customers along the canal and around reservoirs.

EPCOR REMOTE MONITORING PROGRAM

Alberta Environment is exploring new concepts to assist smaller communities improve the performance of their water treatment facilities and has signed an agreement with EPCOR to remotely operate and monitor water facilities in seven Northern Alberta communities. The regional management approach of this pilot project may provide solutions to ongoing non-compliance problems and may prove to be a viable concept in attracting other interested partners into potable water service areas.

results analysis

a deputy minister's message

In the 2003-2004 fiscal year, Alberta Environment was successful in reaching its goals both within and outside the department. Externally, Albertans continued to benefit from the department's work through sustained high quality of air, land and water. Internally, the department maintained its focus on actions to support Alberta Environment staff.

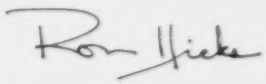
The ministry has long recognized the critical role of staff in achieving ministry goals. Their devotion and dedication to their work continues to be the foundation on which the success of the department is built.

The department continued to develop the capability of its people in the 2003-2004 fiscal year. All employees were encouraged to participate in learning and development activities, including both formal learning and on-the-job opportunities. To support this initiative, each Division allocated an amount equivalent to five per cent of its payroll budget to fund learning and development for staff.

In addition, Alberta Environment supported initiatives that contributed to a healthy workplace environment. The department provided a Learning Account to encourage self-directed learning and personal well-being. All Environment employees had access to this funding throughout the fiscal year. The department also encouraged employees to participate in the "My Healthy Environment" initiatives, in support of employees' physical, emotional and psychological well-being.

In 2003, Environment celebrated its third annual staff recognition event, paying tribute to the outstanding achievements of colleagues and recognizing the efforts of all staff. The department was also honoured with five Premier's Awards of Excellence for the work employees accomplished during 2003-2004.

Congratulations to all department staff for another year of successful accomplishments. Your work this year allowed Alberta Environment to continue its work as a leader in sustaining our environment for the future.



Ron Hicks
Deputy Minister of Environment

AUDITOR GENERAL *Alberta*

report of the auditor general on the results of applying specified auditing procedures to performance measures

To the Members of the Legislative Assembly

In connection with the Ministry of Environment's performance measures included in the *2003-2004 Annual Report of the Ministry of Environment*, I have:

1. Agreed information from an external organization to reports from the organization.
2. Agreed information from reports that originated within the Ministry to source reports. In addition, I tested the procedures used to compile the underlying data into the source reports.
3. Checked that the presentation of results is consistent with the stated methodology.
4. Checked that the results presented are comparable to stated targets, and information presented in prior years.
5. Checked that the performance measures, as well as targets, agree to and include results for all of the measures presented in Budget 2003.

As a result of applying the above procedures, I found no exceptions. These procedures, however, do not constitute an audit and therefore I express no opinion on the performance measures included in the *2003-2004 Annual Report of the Ministry of Environment*.

FCA
Auditor General

Edmonton, Alberta
August 3, 2004

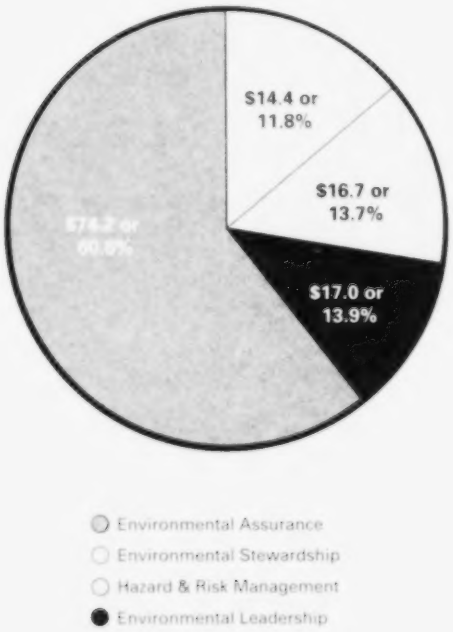
expense by core business

(unaudited)
(in thousands)

	2004		2003
	Budget	Actual	Actual
Environmental Leadership	$ 15,373	$ 16,970	$ 13,925
Environmental Assurance	75,922	74,159	70,188
Environmental Stewardship	15,879	14,443	16,471
Hazard and Risk Management	13,861	16,729	5,983
Total Ministry Expense	**121,035**	**122,301**	**106,567**

Notes:
Expenditure data includes allocated ministry support services and valuation adjustments.
The total ministry expense is included in only one function, Environment.

Figure 2: 2003-2004 Ministry Expense by Core Business
(in millions)



expense by core business

TABLE 1: MINISTRY EXPENSE BY CORE BUSINESS

(unaudited)
(in thousands)

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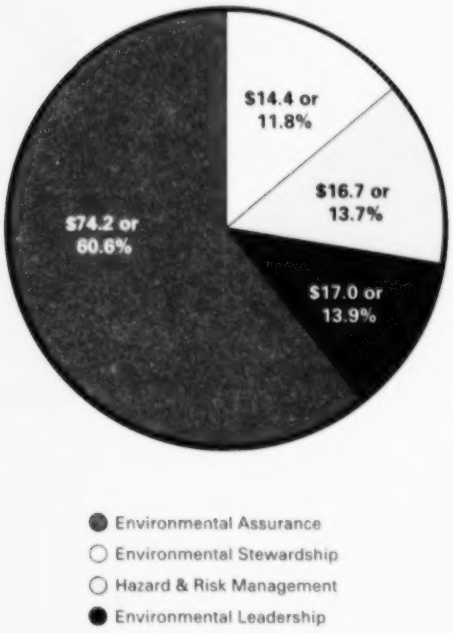


discussion and analysis of results

CORE BUSINESS ONE: ENVIRONMENTAL LEADERSHIP

The Ministry builds and enhances proactive relationships with Albertans to ensure environmental quality for present and future generations. Alberta Environment's leadership vision is expressed through sustainable development policy and long-term adaptive management.

Goal One: Alberta Environment is a leader in proactive environmental protection.
Based on the Ministry of Environment's 2003-2006 Business Plan, the following key developments in water, air, land, climate change, integrated resource management, and regulatory systems contributed to achieving this goal in 2003-2004.

- Alberta Environment successfully assumed responsibility from Alberta Transportation for the newly constructed Little Bow River Reservoir and the upgraded Highwood Little Bow canal that supplies water to this reservoir. Constructed from 1998 to 2003, this project provides a reliable supply of water year-round to residents located in the Little Bow River basin in southwestern Alberta. At full capacity, the Little Bow River Reservoir will contain approximately 50,000 acre-feet of water, about one-eighth of the size of the Oldman River Reservoir. Official opening ceremonies took place in June 2004.
- Alberta Environment has initiated development of a water management plan to effectively deal with long-term water supply issues in the Battle River Basin. The Plan will examine existing water supply and infrastructure, water supply alternatives, and water conservation objectives. Public consultation will be incorporated into plan development. Completion of the final plan is anticipated by spring 2005.
- Alberta Environment is conducting a comprehensive review of approximately 600 municipal waterworks systems across the province. This project is part of the water strategy to ensure that Albertans continue to have safe and secure supplies of drinking water. The first stage of the assessment project was completed in early 2004 and involved facility assessments. The second stage of the project will identify possible long-term solutions for Alberta communities, which in each case may include options such as individual plant upgrades, regional treated water pipelines, or innovative remote facility monitoring and operation practices.
- The AQI is the first provincial air quality reporting system in Canada to include hourly fine particulate matter concentrations ($PM_{2.5}$) – particles one-seventh the diameter of a human hair – which can cause adverse health effects. T ew AQI replaces the Index of the Quality of the Air, which did not accurately reflect air quality during events such as forest fires. Furthermore, Alberta Environment expanded the air quality system by adding a new air quality station in Lethbridge.
- Phase One of the Air Emission Trading Project was completed in May 2003, and indicated that emissions trading in Alberta is technically feasible for nitrous and sulphur oxides, and for greenhouse gases. Phase Two was completed in December 2003 and identified the most prospective path for emission trading, given Alberta's regulatory, emission management and air quality realities.
- The development of a Municipal Waste Action Plan, through consultation with stakeholders, supports the achievement of the waste reduction goal of 500 kilograms per capita by 2010.

- Alberta Environment continued its partnership with Climate Change Central. Significant initiatives delivered by this partnership in 2003-2004 included:
  - *ME first!* – In March 2004, a total of $4.3 million dollars in interest-free loans was made available to seven municipalities to help achieve energy savings in their operations under this Municipal Energy efficiency assistance program. Over four years, up to $100 million in interest-free loans will be provided to support municipal initiatives that improve energy savings.
  - *Alberta Plus Initiative Program* – Through Energy Solutions Alberta, the *Alberta Plus Initiative Program* encourages Alberta developers to increase energy efficiency and cut greenhouse gas emissions.
  - *Alberta Furnace Rebate Program* – Energy Solutions Alberta's pilot *Alberta Furnace Rebate Program* ran from January to March 2004 and provided financial incentives to Albertans who replaced older furnaces with high efficiency models.
- A solar energy project at Lesser Slave Lake Provincial Park completed in March 2004 has upgraded an existing solar array on one of the park's buildings. It is one of 21 energy efficiency projects funded by Alberta Environment at parks throughout the province. Most of these projects involve replacement of older, inefficient furnaces, boilers or upgrading of insulation.
- Alberta Environment received renewed membership in the EcoLogo certification for the Education and Information Centre. This office showcases the use of "green" environmental products and techniques.
- In May 2003, the multi-stakeholder Regional Steering Group for a Northern East Slopes Sustainable Resource and Environmental Management Strategy presented its report to the Minister of Environment. This report outlines strategic directions and actions to support increased awareness and implementation of integrated resource management principles in this region.
- In 2003-2004, Alberta Environment began working together with the departments of Energy and Sustainable Resource Development on integrating policies, harmonizing standards and integrating environmental and resource information systems.

CORE BUSINESS TWO: ENVIRONMENTAL ASSURANCE

The Ministry provides certainty to Albertans that the environment is being managed in a safe and sustainable manner in the present and for the future. The Ministry provides this certainty through its activities in science, standards setting, monitoring, regulation and enforcement.

Goal Two: Sound environmental rules and regulations are in place and enforced.

Based on the Ministry of Environment's 2003-2006 Business Plan, the following key developments in water, air, land, climate change, and regulatory systems contributed to achieving this goal in 2003-2004.

- Consistent with the ministry's priority of assuring safe potable water for all Albertans, all surface water drinking water treatment facilities targeted for inspection in 2003-2004 were inspected. In addition, 50 per cent of drinking water facilities that use a ground water source were inspected (i.e. 100 per cent of drinking water facilities that use a groundwater source are inspected over a period of two years).
- Alberta Environment is leading the development of a water management plan to maximize the benefits of water use in the South Saskatchewan River Basin in a sustainable and environmentally responsible way. Alberta Environment has entered Phase Two of the planning process, and undertaken consultations with Basin Advisory Committees towards developing a strategy that balances water consumption and environmental protection. Once completed, this will be Alberta's first water management plan under the provincial *Water Act*.

- Alberta Environment staff worked with a multi-stakeholder group, the Water Use Practice and Policy Advisory Committee, to review enhanced oil recovery operations and other practices that "permanently remove water from the hydrologic cycle". Before preparing the preliminary report, the Committee reviewed comments received from Albertans and also received extensive information and advice on existing regulations, procedures and industry practices. The overall process was effective in achieving a common understanding of the issues, and in producing a range of recommendations aimed at improving conservation awareness and action.

  This review was conducted in response to concerns identified during the public consultation on *Water For Life: Alberta's Strategy for Sustainability.*

- Alberta Environment has completed a number of water quality and sediment studies on Lake Wabamun. These studies were initiated in 2002 in response to concerns regarding the impact of industrial operations in the vicinity of the lake and incidents of high fish mortality. These studies formed the largest assessment ever undertaken on an Alberta lake and included an assessment of trends in Lake Wabamun water quality over the last 20 years, differences in water quality across the lake, measurements of metals and trace organic contaminants in sediments from Wabamun and other lakes, and an initial evaluation of the significance of sediment quality to aquatic organisms.

  Alberta Environment is continuing to monitor lake quality as part of a long-term monitoring program at Lake Wabamun. The ministry will continue to work with key stakeholders in evaluating the results of studies toward the protection and enhancement of Lake Wabamun. A scientific workshop has been scheduled for summer 2004 to allow for discussion surrounding technical issues, study results and conclusions, and directions for future research. The scientists assembled for this workshop have been selected as a result of their involvement in various aspects of the Wabamun Lake studies, and are considered experts in their respective scientific fields. Public release of the Wabamun reports occurred in May 2003.

- In 2000, Alberta Environment initiated a development process for the creation and revision of Alberta Ambient Air Quality Objectives. In late 2001, the formation of a multi-stakeholder Alberta Ambient Air Quality Objectives Working Group was completed to implement the three year work plan. The Working Group included membership from non-governmental organizations, the public, industry, and government agencies.

  In 2003-2004, Alberta Environment, with support from the Working Group, made several advances on ambient air quality objectives. Objectives were finalized for Propylene Oxide, Acrylonitrile, Acrylic Acid, and Ethylene. Draft objectives were created for Ammonia and Pentachlorophenol. As next steps, objectives are proposed for: Heavy Metals (Arsenic, Manganese, and Nickel), VOCs (Ethylbenzene and Isopropanol), RSCs (Carbon Disulphide, Hydrogen Sulphide, Total Reduced Sulphurs), Fine Particulate Matter, Ozone, Sulphur Dioxide, Cumene, Acetone, and 2-Ethyl Hexanol.

- Coalbed Methane (Natural Gas-in-Coal) (CBM/NGC) has become an important source of energy under rapid development in the province. The public is concerned this new development will adversely impact the environment. Alberta Environment has joined efforts with Alberta Energy, Sustainable Resource Development, Agriculture Food and Rural Development, Alberta Infrastructure and the Energy & Utilities Board and initiated a multi-stakeholder process to review the policies and regulations that govern CBM/NGC development. The review is to ensure responsible development and protection of the environment.

  A multi-stakeholder advisory committee was established in November 2003 and the committee plans to submit its recommendations to the government in November 2004.

› The Government of Alberta has accepted recommendations from the Clean Air Strategic Alliance (CASA), providing a framework to significantly reduce emissions of mercury, sulphur dioxide, nitrogen oxides and primary particulate matter from the province's thermal electricity generation. CASA is still developing greenhouse gas recommendations. Coupled with an earlier "clean as gas" rule for all greenhouse gases from new electric generation facilities, these recommendations will likely become the foundation of an electricity sector agreement under the province's climate change action plan.

› In 2003-2004, Alberta Environment continued discussions with a number of sectors to develop sectoral agreements. The government has signaled the need for coordination among federal and provincial discussions with industry.

› A mandatory greenhouse gas reporting framework is in the final planning stages. Alberta Environment has conducted stakeholder workshops to gain agreement on how reporting will be carried out. The Government of Alberta is working with other governments to ensure that this framework complements a national greenhouse gas reporting program.

› To address the increase in *Environmental Protection and Enhancement Act* and *Water Act* approval renewal applications beginning in 2003, the Approvals Review Project Team was formed to develop and implement options for improving the efficiency and effectiveness of Alberta Environment's regulatory framework. The goal is to focus approvals efforts on activities with a higher potential for environmental impact. This will ensure reviews fit the needs of citizens, municipalities and industry. Phase One of the work was completed in 2003-2004 and resulted in a reduction of over 1,000 applications to Alberta Environment over the next five years.

› Alberta Environment is working to increase the effectiveness and efficiency of how activities with low potential for environmental impact are regulated. A key aspect is a shift from individual approvals to registrations or notifications and Codes of Practice. This provides province-wide operating rules for an activity and leads to regulatory fairness and consistency. On October 1, 2003, the following Codes of Practice went into effect:

- Wastewater Systems Consisting Solely of a Wastewater Collection System
- Wastewater Systems Using a Wastewater Lagoon
- Waterworks Systems Using High Quality Groundwater
- Waterworks System Consisting Solely of a Water Distribution System
- Outfall Structures on Water Bodies

CORE BUSINESS THREE: ENVIRONMENTAL STEWARDSHIP

The Ministry actively encourages and develops awareness, understanding, environmentally responsible behaviour and decision-making by individuals, communities and industries. Decision-making that produces a healthy environment is achieved through innovation, partnerships, collaboration and education.

Goal Three: Environmental protection is practiced as a collaborative effort through partnerships.

Goal Four: Improve environmental public education and communication.

Based on the Ministry of Environment's 2003-2006 Business Plan, the following key developments contributed to achieving these goals in 2003-2004.

- Water shortages are challenging to water users who need assured water supplies. As part of the ministry's education and awareness efforts to better communicate options available to water licence holders under the *Water Act*, Fact Sheets were developed to clearly explain how transfers could be obtained and how licences could be cancelled. Administrative guidelines further ensured transfers of all or a portion of a water allocation licence would be handled in a consistent manner across the province. This initiative supports department efforts toward ensuring the appropriate use and allocation of water for the benefit of Albertans now and in the future.

- In 2003-2004, Alberta Environment launched new web sites for water quantity, water conservation, and surface water quality. The water quantity web site provides a sound base of knowledge concerning both groundwater and surface water quantity in Alberta. The web site can be found at: www.gov.ab.ca/env/water/gwsw/quantity/index.cfm.

  The water conservation web site provides information on the value of water, the users of water, and conservation activities for residential, industrial/commercial/institutional, and agricultural users. The web site can be found at: www.gov.ab.ca/env/water/conservation/index.cfm.

  Alberta Environment's new surface water quality web site offers information about the province's surface water quality, and how it is studied and monitored. It provides information on water quality conditions in the province's many lakes, rivers and reservoirs. The new web site also features the provincial Surface Water Quality Guidelines, shows how the Surface Water Quality Index is calculated and applied, and outlines procedures for obtaining data on lakes and rivers in the province. As well, the web site identifies various partners around the province that monitor and evaluate water quality in cooperation with Alberta Environment. The web site can be found at: www.gov.ab.ca/env/water/swq/.

  The release of these web sites builds on the department's commitment in the *Water for Life* strategy of "providing web based products to share our knowledge about quality and quantity of Alberta's water supplies with Albertans so as to provide them with knowledge and information required to become active participants in watershed management on a provincial, regional, and community basis". In the future, access to data, information and knowledge surrounding water will be further enhanced with the release of the first version of the Provincial Water Information Centre.

- In July 2003, FEESA, an environmental education society, in partnership with Alberta Environment, piloted an eight-day teacher professional development program on Alberta's water resources; their use, management and future. The program was a direct response to a need assessed through public input into *Water for Life: Alberta's Strategy for Sustainability*. A half-day forum attended by 28 institute educators and 25 representatives of water stakeholders followed the institute. Eight major sponsors from the public and private sectors supported the institute and forum programs.

- Alberta Environment establishes annual targets for a number of proactive, unannounced compliance inspections of approved or regulated facilities. These inspections fulfill an educational and preventative role by ensuring regulated parties clearly understand their statutory obligations. In 2003-2004, Alberta Environment inspectors conducted close to 1,000 inspections and 500 sampling events. These inspections focused on industrial, municipal, code of practice, pesticide and solid waste facilities.

  In addition to these proactive inspections, compliance staff also handled close to 12,000 calls, including 3,300 public complaints, and 8,000 calls from Alberta Industry. Over 30 per cent of calls were taken after routine working hours by on-call staff in Edmonton and Calgary.

  Also, as part of the overall Compliance Assurance Inspection Program, Alberta Environment conducts several annual compliance sweeps that focus on a geographic area or industry. These inspection "sweeps" are a proactive initiative Alberta Environment uses to educate industrial sectors regarding their responsibilities under the *Environmental Protection and Enhancement Act* and the *Water Act*; achieve compliance through cooperative means; and encourage best management practices and pollution prevention. The program involves two parts; an educational component, where specific detailed information about regulations and requirements are provided to businesses, followed by unannounced inspections to ensure businesses make any necessary upgrades required.

  A total of nine sweeps were conducted across the province this year, with a focus on the handling and storage of hazardous wastes and hazardous recyclables. This included sweeps of industrial parks in Edmonton, Red Deer and Lloydminster, commercial and industrial operations north of Calgary and in Slave Lake, autobody shops in Edmonton and radiator repair businesses in Edson.

- The Environment Week and Waste Reduction Week programs for 2003 were excellent vehicles for educating the public on water quality and conservation issues as well as waste reduction and recycling issues. A number of private sector partners supported Environment Week and Waste Reduction Week activities in communities across the province. Environment Week and Waste Reduction Week supported a variety of activities across the province. Newspaper inserts featuring environment and waste topics were distributed in 500,000 newspapers.

- There were 5,331 hits per month on the environmental education web site in 2003. In 2004, the average number of monthly visits to the website is approaching 6,000.

- Alberta Environment staff delivered environmental education presentations, workshops and information sessions to teachers, student teachers and K-12 students across Alberta. Over 3,000 individuals were reached with these activities.

- The ministry delivered approximately 60,000 tree seedlings, 1,500 trees and 1,000 teaching kits across Alberta to support Arbor Day, and the Centennial Tree Program.

- The "Minister for the Day" program attracted 180 students from across Alberta. Winning students spent the day with the Environment Minister.

CORE BUSINESS FOUR: HAZARD AND RISK MANAGEMENT

The Ministry ensures that public notification and response systems are in place to provide prompt and effective responses to environmental emergencies. The Ministry is proactively engaged in environmental risk management to anticipate issues and opportunities that may arise so Alberta is ready for both expected and unexpected events.

Goal Five: Alberta Environment ensures quick and competent responses to emergencies.
Based on the Ministry of Environment's 2003-2006 Business Plan, the following key developments contributed to achieving this goal in 2003-2004.

- Further to a competitive review and selection process, Alberta Environment is implementing an Environmental Infrastructure Management software system to provide more effective and efficient planning, prioritization, scheduled inspection, maintenance and rehabilitation of Alberta Environment's $5.1 billion of water management infrastructure and to meet mandated requirements of the Government Capital Planning Initiative. Scheduled for completion in spring 2004, this management tool will enable the department to track inspection and maintenance activities for water infrastructure, assign attributes and assist in the capital planning/priority setting process by scoring and ranking projects based on performance measure ratings.

- In April 2003, Alberta Environment formally designated the flood risk area for the Town of Sundre and adjoining lands in Mountain View County No. 17 under the Canada-Alberta Flood Risk Damage Reduction Program. This program is aimed at reducing the damage of potential flooding by identifying vulnerable areas and encouraging municipalities to regulate development in flood prone areas. Flood risk maps illustrate areas that could be affected by a one in 100 year flood, or a one per cent chance of flooding each year. The Town of Sundre and Mountain View County have expressed support for this designation and have incorporated flood risk maps as part of their land use bylaws.

- In 2003, Alberta Environment partnered with other ministries to coordinate activities to monitor and test for the West Nile virus in the province and to communicate with the public and health professionals about the disease.

  Although the risk of humans getting West Nile virus in Alberta remained low, the department took preventative action to protect and prevent Albertans from the disease.

  Alberta Environment supported a public information campaign, which began in May, to educate Albertans about West Nile virus and offer practical advice on reducing the risk of infection. In conjunction with municipalities, the province developed a mosquito surveillance program to learn more about the province's mosquito population and to detect the disease.

- Household hazardous wastes consist of solid or liquid materials, or containers holding gasses, which outlived their usefulness and require special handling and treatment in the way they are discarded. They may be flammable, corrosive, or toxic.

  In 2003-2004, 115 community sponsored round-ups were held to collect household hazardous waste. Nearly 974,000 litres of materials were collected and disposed of at the Swan Hills Treatment Centre. Over 151,650 aerosol cans were processed during the year.

- Alberta Environment continues to emphasize its commitment to Occupational Health and Safety (OH&S). The total number of OH&S incidents in Alberta Environment decreased from nine incidents with 35 lost-time days in 2002, to one incident with one lost-time day in 2003.

Goal Six: Ensure the Ministry's commitment to environmental protection and sustainability is supported by its practices in strategic business services.

Based on the Ministry of Environment's 2003-2006 Business Plan, the following key developments contributed to achieving this goal in 2003-2004.

- The Information Centre previously located at Great West Life Building was moved to Oxbridge Place, and integrated with the Environmental Education Centre. This area is now known as the Education and Information Centre.
- The Ministry of Environment and Sustainable Resource Development's Information Centre provided the following services to members of the public, both within and outside Alberta. During 2003-2004 this service:
  - responded to 1,923 e-mail requests
  - handled 19,521 telephone calls
  - served 10,178 walk-in visitors
  - distributed 5,052 Ministry publications
- The FOIP office received 823 access requests for information from Alberta Environment in the 2003-2004 fiscal year. This compares with 748 requests from the previous year.
- Alberta Environment made the equivalent of five per cent of payroll dollars available to actively encourage ongoing professional and personal learning and development opportunities for staff. Ninety-two per cent of Alberta Environment employees used their Learning Accounts to support continuing development.
- Office Ecology, a grassroots program that encourages staff in such environmental practices as waste minimization and recycling, resource conservation and responsible procurement, continued in 2003-2004. In the past year the Office Ecology initiative:
  - Encouraged the purchase of recycling centres for Alberta Environment offices. There are now a total of 19 recycling centres in Alberta Environment offices. The centres are made from recycled material, and purchased from an Alberta company.
  - Gained Executive Committee support, adding further proof the ministry "walks the talk".
  - Represented the ministry on the Rechargeable Battery Recycling Program and participated in Energy Conservation Week and Environment Week activities.

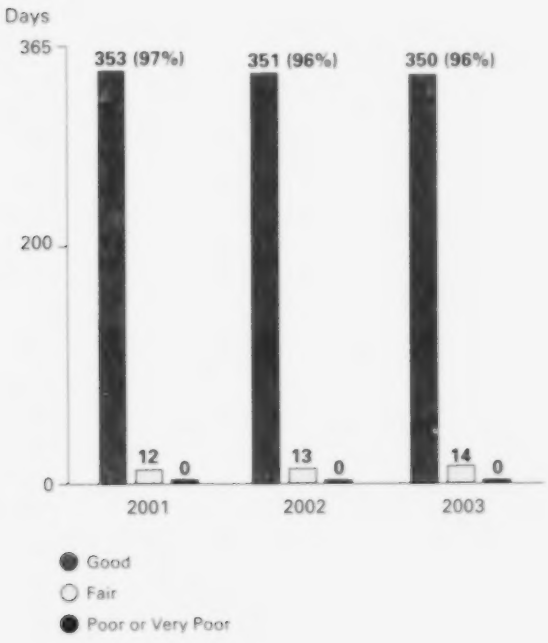
Variances between planned and actual spending for all core businesses was affected by the reallocation of shared corporate costs from individual core businesses to Ministry Support Services. This reallocation did not affect spending related to program priorities. Based on priority needs, funds were reallocated from Environmental Assurance and within Environmental Stewardship to support the Alberta Waste Management Assistance Program as necessary to fulfill government commitments to local authorities under this program.

performance measures

AIR QUALITY INDEX

A key environmental focus of Albertans is the quality of the air we breathe. Ensuring the protection of Alberta's clean air is paramount to maintaining our health and quality of life. "Poor" air quality may also have negative effects on crop quality and production. The Air Quality Index provides an indication of the quality of air in Alberta throughout the year. Air quality is influenced by a number of factors, including forest fires, weather patterns, vehicle emissions and intensity of industrial development. In Alberta, "fair", "poor" or "very poor" air quality can occur when smoke from forest fires is transported into urban centres. "Poor" air quality can also occur during summertime and wintertime smog events.

Figure 7: Air Quality Days



Note: There were no "poor" or "very poor" days between 2001-2003. Bars have been included for presentation purposes.

Data

The Air Quality Index is a measure of outdoor concentrations of five major air pollutants (carbon monoxide, fine particulate matter ($PM_{2.5}$), nitrogen dioxide, ozone, and sulphur dioxide) monitored at nine stations (three in both Edmonton and Calgary and one station in each of Red Deer, Fort McMurray and Fort Saskatchewan) across the province.

Target

Maintain "good" air quality days equal to or greater than 97 per cent of the time, with no "poor" days.

Results

Figure 7 shows the number of air quality days in each category on an annual basis. In 2003, "good" air quality occurred 96 per cent of the time, slightly below the 97 per cent target. Increased frequencies of "fair", "poor" and "very poor" air quality in 2003 were influenced by smoke from forest fires in southwestern Alberta and southern British Columbia.

Air Quality Index Ambient Monitoring Stations

SURFACE WATER QUALITY INDEX

Data

The Surface Water Quality Index is used to evaluate water in Alberta's major river systems with respect to four groups of variables: metals, bacteria, nutrients and pesticides. Results from these four groups are combined to provide an indication of overall water quality. River water quality is reported because the effects of human activities are generally more diverse and easier to measure in rivers than in lakes. The index can be used to show relative differences in water quality between rivers, between sites on the same river (e.g. upstream and downstream from cities), and over time.

A number of natural and human factors can influence index values: river flow volume, temperature, the degree of development along rivers, non-point sources of runoff (such as agricultural fields), and point sources of effluent that discharge into rivers. For example, during spring runoff, concentrations of nutrients and metals may exceed guideline values, even in "natural" areas, simply because they are present in soils washed into river waters.

Data are collected monthly or quarterly at a number of locations throughout the province. These stations make up the provincial Long-Term River Network (LTRN). Stations upstream and downstream from agricultural, industrial, or municipal areas are compared to examine the overall impact of these developments on river water quality. Index values for a sub-set of these stations from the province's six major river systems comprise the Surface Water Quality Index and show changes in water quality that have occurred over the past four years (Figure 8).

Target

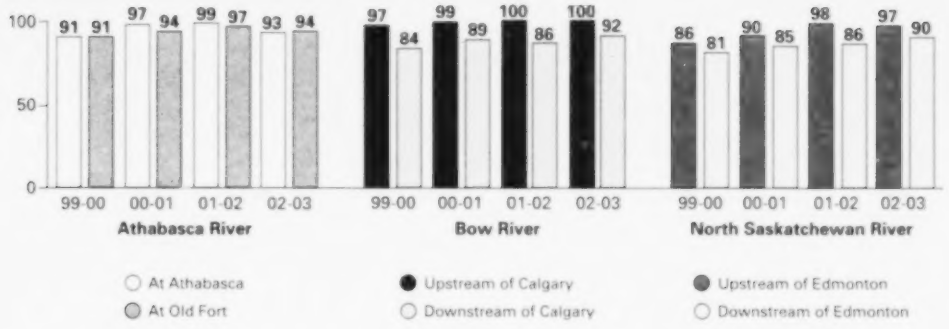
Bring river water quality downstream of developed areas in line with upstream conditions, while maintaining overall river water quality.

Results

Overall, index values show continued high water quality. In 2002-2003, the quality of Alberta's major rivers was generally rated "good" to "excellent" (Figure 8).

For some sites, 2002-2003 Surface Water Quality Index scores are lower than those for previous years because of changes in local weather conditions. More rain and snowmelt resulted in increased surface runoff and therefore increased movement of materials from the land to the water in some areas. In lower flow years, higher scores can be expected due to reduced movement of materials, whether naturally occurring or as a result of human activity, from the land to the water. Five river systems continued to have "good" or "excellent" water quality, with the exception of the Oldman River, which was rated as "fair", primarily due to increased seasonal run off.

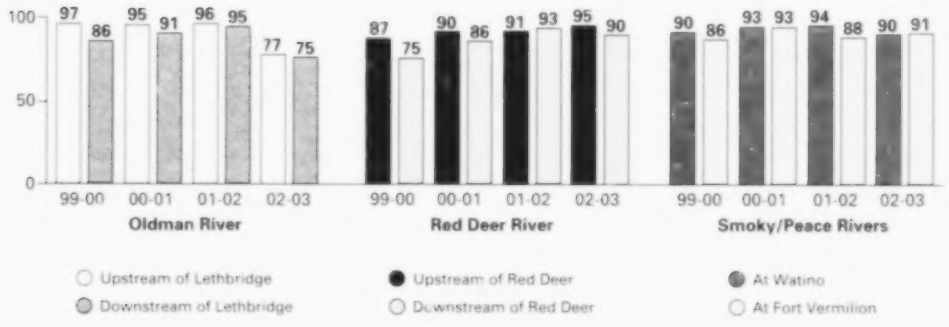
Figure 8: Alberta Surface Water Quality Index



Athabasca River
Pesticide and bacteria levels remained very low at Athabasca and Old Fort. Overall index values decreased slightly this period at both sites due to higher spring nutrient concentrations.

Bow River
Water quality was better upstream of Calgary than downstream. An increase in the downstream index was due to generally lower nutrient, metal and pesticide values relative to the previous period.

North Saskatchewan River
This period, pesticide detections decreased at both sites, though elevated nutrient values during spring runoff produced a slight decrease in the upstream index. An increase in the downstream index was mainly due to reduced nutrient and bacteria levels.



Oldman River
Water quality was slightly better upstream of Lethbridge than downstream. The decrease in index values was largely due to elevated nutrient and bacteria values measured during late spring. This reflected water quality during very high river flows, influenced by increased runoff and non-point source loading.

Red Deer River
An increase in the upstream index was primarily the result of decreased pesticide detections. A slight decrease in the downstream index was due to elevated nutrient levels in spring and low winter dissolved oxygen measurements.

Smoky/Peace River
At Watino, pesticide detections decreased this period. However, the overall index value decreased slightly due to elevated nutrient, metal and bacteria levels associated with high spring suspended solids concentrations. At Fort Vermillion, the index value increased due to low spring nutrient and bacteria concentrations.

Index	Guidelines
96-100	Almost always met (Excellent)
81-95	Occasionally not met, but usually by small amounts (Good)
66-80	Sometimes not met by moderate amounts (Fair)
46-65	Often not met, sometimes by large amounts (Marginal)
0-45	Almost always not met by large amounts (Poor)

Index based on the results of testing water quality for four variable groups compared to water quality guidelines.

Surface Water Quality Index Monitoring Stations Map

1 Athabasca River at Athabasca
2 Athabasca River at Old Fort
3 Bow River at Cochrane
4 Bow River Downstream at Carseland Dam
5 North Saskatchewan River at Devon
6 North Saskatchewan River at Pakan
7 Oldman River at Highway 36
8 Oldman River at Highway 3
9 Peace River at Fort Vermilion
10 Red Deer River at Highway 2
11 Red Deer River at Morrin Bridge
12 Smoky River at Watino

Surface Water Quality Index Monitoring Stations Map

1 Athabasca River at Athabasca
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8 Oldman River at Highway 3
9 Peace River at Fort Vermilion
10 Red Deer River at Highway 2
11 Red Deer River at Morrin Bridge
12 Smoky River at Watino

DRINKING WATER QUALITY INDICATOR

Data

Under the *Environmental Protection and Enhancement Act*, Alberta Environment regulates waterworks facilities that provide drinking water to Albertans. The Drinking Water Quality Indicator is a new measure that assesses the ability of each waterworks facility to meet the newest design standards, operational requirements and performance standards based on the health-related concentration limits for substances listed in the Guidelines for Canadian Drinking Water Quality.

Target

This is baseline data that will be used to establish specific targets for future years. The overall target is maintenance of a safe supply of drinking water for the population served by the waterworks facilities approved by Alberta Environment.

Results

In 2003-2004, benchmark data was used to determine that 69 per cent of regulated facilities are operating under the newest (1997) design standards. There were 20 incidents where facilities did not meet operational requirements and 31 incidents where facility performance standards were not met and resulted in a water quality parameter (chemical, physical or bacteriological) temporarily exceeding the acceptable limit. Where non-compliance was an issue, Alberta Environment took appropriate action to ensure facility operators acted accordingly to prevent recurring incidents and consequent poor drinking water.

Table 3: Drinking Water Quality Indicator

Facility Design Standards	2003-2004
Number of Regulated Facilities	544
> Number of Facilities Meeting Newest (1997) Standards	377 (69%)
> Number of Facilities Meeting Standards Applicable at Time of Approval or Registration Issuance	167 (31%)
Facility Operational Requirements	**2003-2004**
Number of Incidents	20
> Number of Facilities Where Incidents Occurred	17
Water Quality	**2003-2004**
Number of Incidents Where Health-Related Limits Were Exceeded	31
> Number of Facilities Where Health-Related Limits Were Exceeded	30
Incidents of Illness	**2003-2004**
Under Development	n/a

REDUCTION OF MUNICIPAL SOLID WASTE TO LANDFILLS

Data

The Alberta government provides technical and financial assistance to municipalities for waste management and recycling infrastructure, as well as training, education and general awareness about waste management options and opportunities. Industry stewardship programs have been developed for used oil materials, tires and beverage containers. Additionally, a provincial stewardship program for recycling electronics was approved in principle in March 2004. With a prosperous economy, the pressures on landfills will continue to grow.

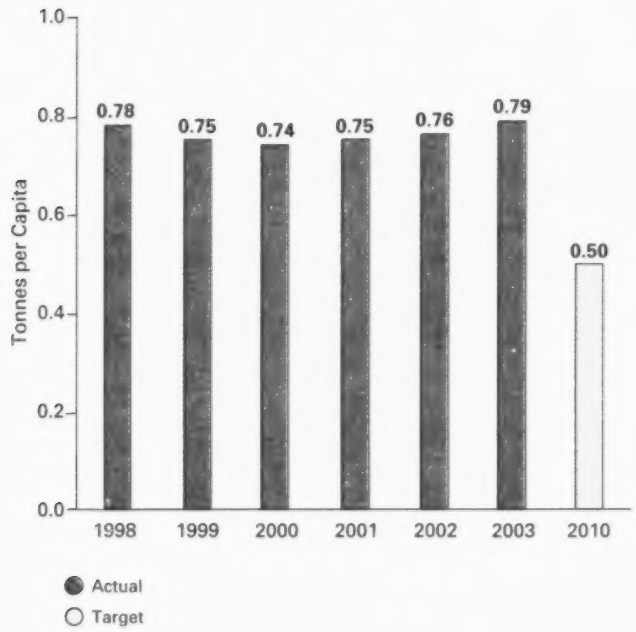
Target

The waste reduction target for Alberta is to reduce municipal solid waste disposal to landfills to 0.5 tonnes per capita by 2010.

Results

Figure 9 shows the amount of municipal solid waste going into landfills each year, measured in tonnes per capita. The amount of municipal solid waste going into landfills in 2003 increased from 2002. This increase can be attributed to Alberta's current robust economy. While many municipalities have had some success in reducing waste from the Residential sector, landfills report increased tonnage from the Industrial/Commercial/Institutional sector and the Construction/Renovation/Demolition sector.

Figure 9: Municipal Solid Waste to Landfills



AMOUNT OF BIOCHEMICAL OXYGEN DEMAND SUBSTANCES DISCHARGED

Data

This measure is one indicator of Alberta Environment's performance in protecting aquatic ecosystems. Oxygen is required in the biochemical breakdown of organic matter in pulp mill wastewater. This breakdown may decrease the amount of oxygen available to aquatic organisms. An excess amount of these substances could cause a shortage of oxygen available to keep aquatic ecosystems healthy. To help control the amount of substance released to aquatic ecosystems, each pulp mill is issued an approval, which restricts the amount of biochemical oxygen demand (BOD) that can accompany the release of substances into river water. The current average standard for BOD levels is 3.0 kilograms per tonne of pulp.

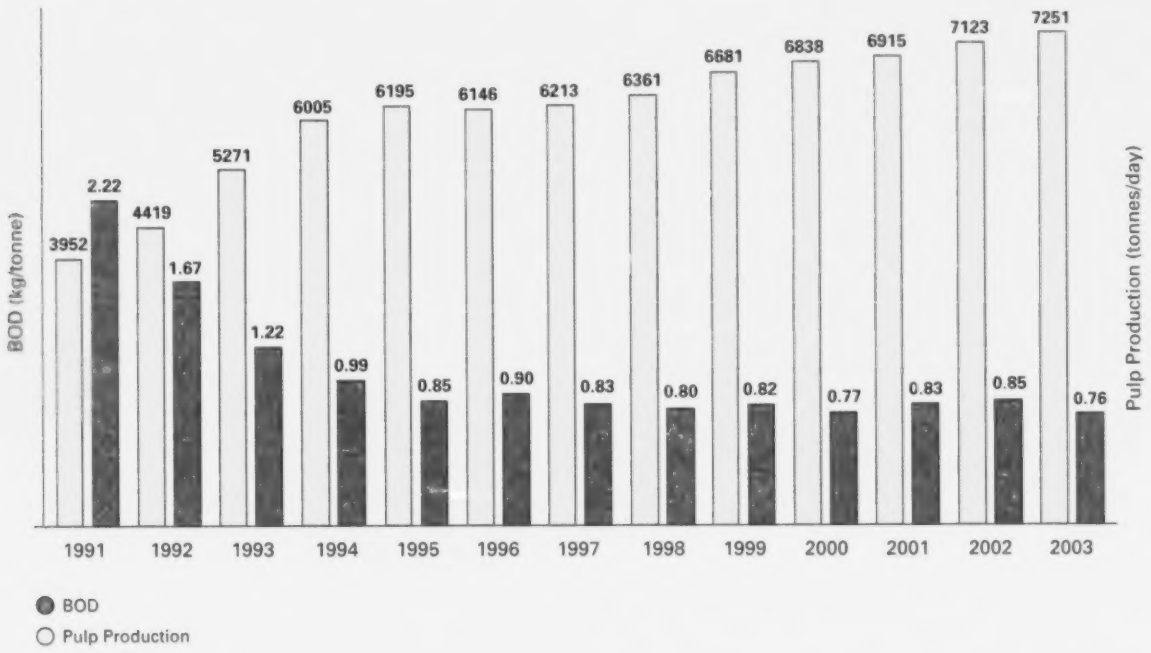
Target

BOD discharged for 2003 does not exceed 1.0 kilogram/Air Dried Tonne of pulp.

Results

Figure 10 shows industry is well below the standard and performance measure target. Historical data confirm continuous improvement and that the amount of BOD released per tonne of pulp has dropped substantially over the past 13 years.

Figure 10: Pulp Production Versus Amount of Discharge



GOVERNMENT OF ALBERTA GREENHOUSE GAS EMISSION PROFILE

Data

The Government of Alberta demonstrates leadership in improving energy use through its actions to reduce greenhouse gas (GHG) emissions from government operations. The measure aims to improve the energy efficiency of Alberta government operations through three main focus areas. These areas include retrofits of government buildings to reduce energy consumption (e.g. more efficient lighting, heating, and ventilation systems), improved operation of government vehicles, and reduction in waste produced by government employees in the course of their duties.

Note only emissions from "core" government activities are included in this measure (i.e. activities by Alberta government ministries). Further, emissions from buildings leased by the Government of Alberta are not tracked under this measure due to data access and limited ability to invest in emission reduction activities. Baseline figures represent where emissions would be if no action was taken.

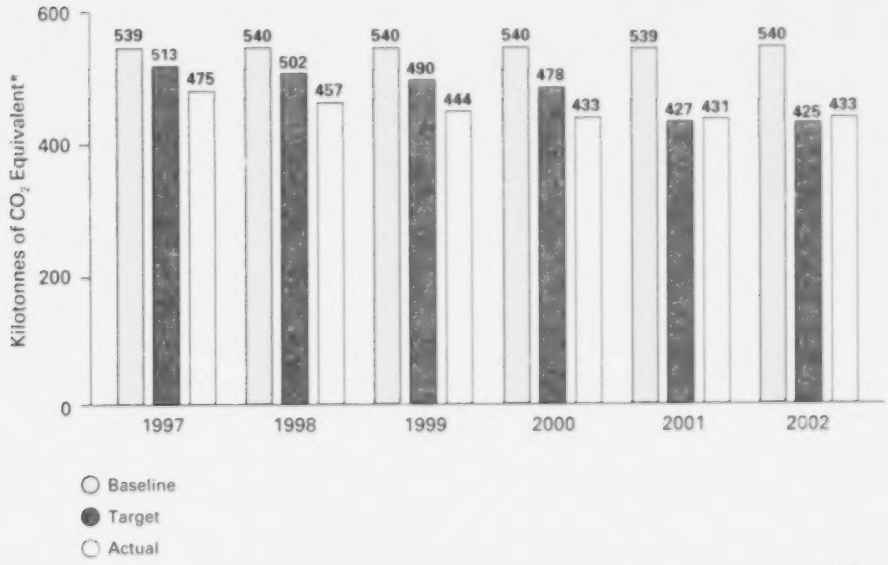
Target

The new target is to reduce GHG emissions 26 per cent below 1990 levels by the year 2005. In 1990, emissions were 549 kilotonnes of CO_2 equivalent. The new target is 406 kilotonnes of CO_2 equivalent by 2005.

Results

Figure 11 shows the Alberta government's greenhouse gas emissions increased slightly to 433 kilotonnes of CO_2 equivalent in 2002, which exceeded the annual target of 425 kilotonnes of CO_2 equivalent. However, it represents a decrease of 21 per cent compared to 1990 levels.

Figure 11: Alberta Government Baseline, Targets and Actual Figures for Greenhouse Gas Emissions



ALBERTA ORGANIZATIONS ENERGY PRODUCTIVITY IMPROVEMENTS

Data

The measure uses annual data obtained from the National Voluntary Challenge and Registry (VCR Inc.) to determine how many action plans have been filed by organizations headquartered in Alberta throughout a given year. Organizations operating in Alberta that do not have headquarters based here are not listed as Alberta organizations. This indicates success in obtaining voluntary action by Alberta organizations to reduce greenhouse gas emissions.

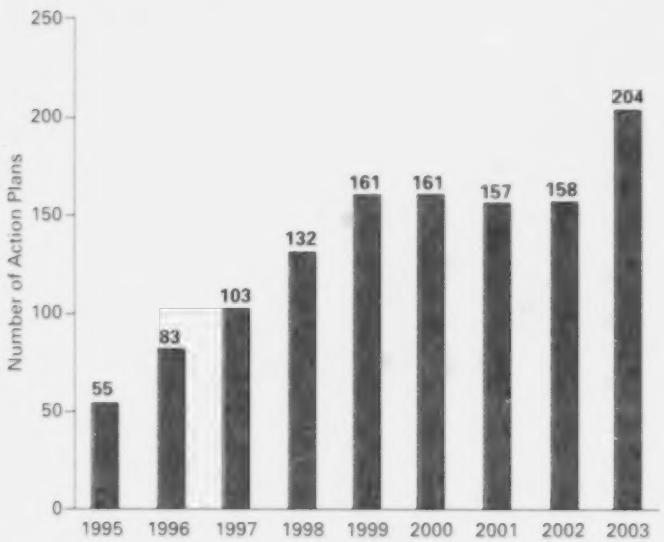
Target

Continued increase in the number of registered plans.

Results

Figure 12 shows the number of Action Plans registered by Alberta organizations increased significantly to 204 in 2003. Participation has more than tripled since 1995. The strong increase in 2003 can largely be attributed to growth in registered Action Plans by provincial commercial and institutional organizations, such as hospitals and schools.

Figure 12: Cumulative Number of Submitted Action Plans from Alberta Companies to VCR Inc.



GREENHOUSE GAS EMISSIONS INTENSITY INDICATOR

Data

The Greenhouse Gas Emissions Intensity Indicator compares total annual greenhouse gas (GHG) emissions across the Alberta economy to total provincial gross domestic product (GDP) generated in Alberta since 1990.

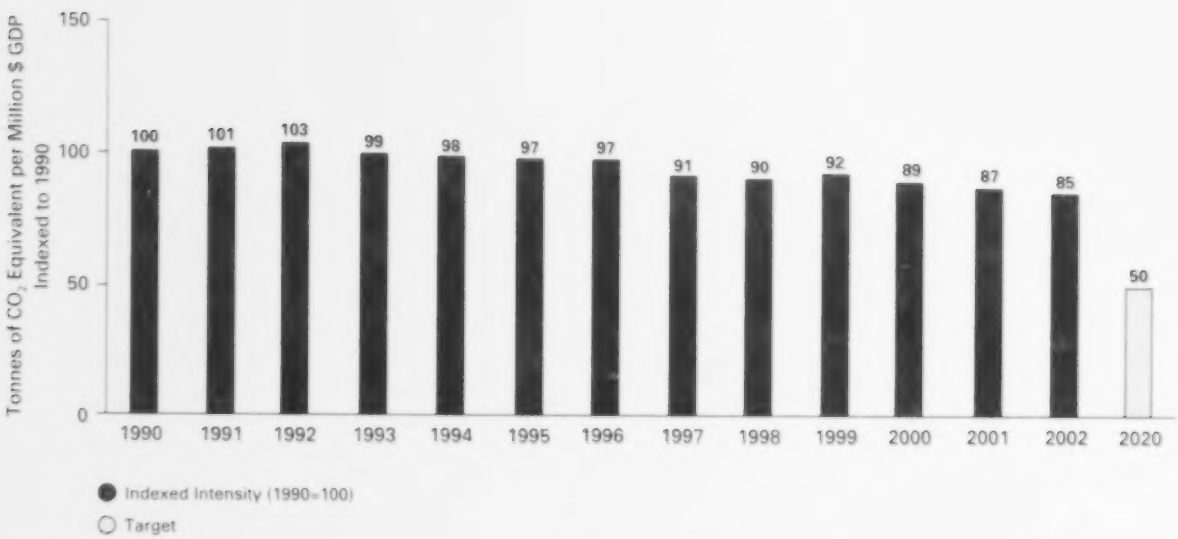
Target

Cut the greenhouse gas emissions intensity of the Alberta economy in half (50 per cent) by 2020 relative to 1990 levels. This represents an approximate absolute reduction of 60 million tonnes of CO_2 equivalent from business as usual levels.

Results

Alberta's emissions intensity continued to decline in 2002, and was down two index points compared to 2001. This improvement in emissions intensity was a reflection of strong economic growth experienced over the year, coupled with a relatively modest increase in associated greenhouse gas emissions. Specifically, much of the improvement can be attributed to strong economic growth in low GHG emissions sectors (e.g. Services, Finance, etc.), with moderate economic growth in higher GHG emissions sectors (e.g. Energy, Manufacturing, etc.). With 2002 emissions intensity at 15 index points below 1990 levels, Alberta is nearly a third of the way to the 2020 target.

Figure 13: Alberta Greenhouse Gas Emissions Intensity



› Based on draft 2002 GHG emission estimates from Environment Canada as of April 23, 2004

› Current figures reflect an adjustment made to both GHG emissions and GDP data back to 1990 (by Environment Canada and Alberta Finance respectively)

Source: GDP – Alberta Finance; GHG Emissions – Environment Canada (draft 2002 figures)

data sources and methodology

AIR QUALITY INDEX

The Air Quality Index (AQI) is calculated from outdoor concentrations of five major air pollutants monitored at nine stations across the province. The pollutants used to calculate the AQI are carbon monoxide, fine particulate matter ($PM_{2.5}$), nitrogen dioxide, ozone and sulphur dioxide. The AQI is calculated at three stations in each of Edmonton and Calgary and one station in each of Red Deer, Fort McMurray and Fort Saskatchewan. The AQI number is used to determine whether the quality of the air is "good", "fair", "poor" or "very poor". These categories are derived using formulas based on air quality guidelines under the *Environmental Protection and Enhancement Act* and the *National Ambient Air Quality Objectives*. The AQI is calculated hourly and presented in terms of days. Results are rounded to the nearest whole number.

In 2003, the Air Quality Index was modified to include hourly measurements of small particulates ($PM_{2.5}$). $PM_{2.5}$ are particles small enough to be inhaled into the lungs and, depending on their composition, may be a human health concern. Hourly $PM_{2.5}$ data are available from all nine stations in 2003. However, in 2001, hourly $PM_{2.5}$ was not measured at the Calgary Northwest, Calgary East and Fort Saskatchewan monitoring stations. In 2002, hourly $PM_{2.5}$ was not measured at the Calgary Northwest and Calgary East stations.

Air quality is influenced by a number of factors, including vehicle emissions, weather patterns, forest fires and intensity of industrial development. In Alberta, "fair", "poor" or "very poor" air quality can occur when smoke from forest fires is transported into urban centres. "Poor" air quality can also occur during summertime and wintertime smog events.

On hot, sunny summer days, smog can be formed due to a complex set of chemical reactions involving pollution from automobiles and industry. Summertime smog has a light brown colour and can reduce visibility. Ground-level ozone is a major component of summertime smog.

Wintertime smog can occur when there is a strong temperature inversion and light winds. This combination of weather conditions will often create a layer of cool, stagnant air near the ground. Air pollutants, mostly from automobiles, are trapped in this layer of stagnant air.

SURFACE WATER QUALITY INDEX

Water quality samples are collected at two locations for each of the province's six major river systems. An index value is calculated for each of four variable groups for data collected between April and March, representing both a fiscal and a "water" year:

- Metals (up to 22 variables measured quarterly),
- Nutrients (six variables measured monthly, includes oxygen and pH),
- Bacteria (two variables measured monthly), and
- Pesticides (up to 17 variables measured four times through the summer).

Index values for the four variable groups are then averaged to produce an overall index of surface water quality that can be tracked over time.

The formula used to calculate index values for each group is based on three statistical attributes of water quality with respect to desirable levels (defined by water quality guidelines in most cases):

- Scope – the total number of water quality variables that do not meet guidelines,
- Frequency – the number of individual measurements for all variables combined that do not meet guidelines, and
- Amplitude – the amount by which measurements do not meet guidelines.

Variables in the first three groups (metals, nutrients and bacteria) are compared to guidelines listed in *Surface Water Quality Guidelines for Use in Alberta.* Where a number of guidelines exist for one variable, the guideline for the most sensitive use (recreation, agriculture, or the protection of aquatic life) is chosen. Drinking water guidelines are not considered, since surface water should not be used for drinking without first being treated. Some historic index values have been restated based on an improved ammonia calculator and revised metals guidelines.

Variables in the fourth group (pesticides) are evaluated based on whether they can be detected in a water sample. This conservative approach was adopted because some pesticides do not yet have official guidelines and, unlike metals, nutrients and bacteria, do not occur naturally in the environment.

DRINKING WATER QUALITY INDICATOR

The Drinking Water Quality Indicator is comprised of four separate measures that collectively provide an indicator of the performance of regulated waterworks facilities in delivering safe drinking water to Albertans. This year's baseline data will be used to establish targets for future years.

Under the *Environmental Protection and Enhancement Act*, Alberta Environment regulates waterworks facilities that provide drinking water to Albertans through a variety of developments, including campgrounds, rural subdivisions, villages, towns, and cities. These facilities must obtain an approval or registration that is issued if the system meets the design standards in effect at the time of application and must operate under the conditions of the approval or registration, which includes self-reporting of non-compliance. Alberta Environment staff also inspect regulated facilities, report on the number of non-compliant incidents identified during inspections, and take appropriate action as required.

The Facility Design Standards measure is based on an assessment of existing regulated waterworks facilities against the newest Alberta Environment design standards for water treatment systems. Standards are revised every five to 10 years, with the latest revision in 1997. In total, 377 (69 per cent) facilities have maintained or upgraded to meet the latest standards. The performance of the remaining 167 (31 per cent) facilities is frequently reviewed to determine when upgrading will be necessary. Infrastructure upgrades are often costly, and must be planned over a number of years. Alberta Environment maintains an inventory of the status of facilities and compiles the results to provide this measure. Industrial waterworks facilities are also regulated by Alberta Environment, but are not included in this measure.

The Facility Operational Requirements measure shows incidents where approval conditions have not been met that could lead to water quality concerns. Examples include inadequate monitoring or the facility operator not having the appropriate certification. In 2003-2004, 20 incidents were identified in 17 facilities. In these instances, Alberta Environment worked with the facilities to correct the problems.

The Water Quality measure shows incidents where the water supplied by a facility had a water quality parameter (chemical, physical or bacteriological) exceed the limits attached to the facility's approval or registration. Limits are based on the health-related concentration limits for substances listed in the *Guidelines for Canadian Drinking Water Quality*. Some health-related limits are a concern if the water is consumed over a long period of time (many years) and others are of a more immediate concern. Intervention is needed in either case, and may range from a public health advisory, preventing consumption of the water, to a requirement to upgrade a waterworks facility.

In 2003-04, there were a total of 31 water quality incidents that occurred at 30 facilities. One resulted in a continuing public health intervention in the form of a Boil Water Advisory. Seven potential Boil Water Order situations were corrected immediately and did not require public advisory. Twenty-three incidents exceeded the health-related limit for total Trihalomethanes (THMs). THMs are a byproduct of disinfecting drinking water with chlorine in the presence of elevated organic material. Short-term consumption of water that contains THMs over the limit does not pose a significant health risk, but indicates there is need to address the situation. The preferred method of controlling disinfection byproducts is the efficient removal of organic particles in the treatment process, however controlling disinfection byproducts must not compromise the effectiveness of the disinfection, as this is a far greater public health risk. In order to resolve these types of situations, Alberta Environment is working with facility owners to ensure when water systems are expanded or upgraded, every effort is made to reduce the concentration of THMs through improvements to treatment plant operations or plant upgrades.

Notifications received from facilities through self-reporting are combined with inspection data in creation of both the Facility Operational Requirements measure and the Water Quality Measure.

The Incidents of Illness measure is under development with Alberta Health and Wellness and Regional Health Authorities. This measure intends to show the number of times incidents of illness were attributed to the consumption of unsatisfactory drinking water.

REDUCTION OF MUNICIPAL SOLID WASTE TO LANDFILLS

This measure tracks the tonnes per capita of municipal solid waste going into municipal landfills in Alberta. The Canadian Council of Ministers of the Environment developed the methodology used for the measure. The calculation is based on two parts. The first is the population served by each applicable landfill, using population figures from Alberta Municipal Affairs. The second is the tonnes of municipal solid waste sent to each landfill. The calculation can also be further divided to illustrate urban and regional disposal amounts. The information is voluntarily provided by landfills, and includes only those landfills with weigh scales. Estimates are used for the remaining population, and are derived by multiplying measured urban and regional per capita disposal rates with unmeasured populations. Using the above information, the provincial tonnes per capita of municipal solid waste going into landfills is presented. Some historic values have been restated based on a revised figure of the population that send waste to municipal landfills.

AMOUNT OF BIOCHEMICAL OXYGEN DEMAND SUBSTANCES DISCHARGED

Data is derived from the discharge monitoring component of the ministry's Environmental Management System (EMS). The seven pulp mills submit monthly monitoring data that is entered into the EMS system.

The BOD and pulp production data for the seven mills is extracted from EMS. The average pulp production per day and the average kilograms of BOD released per day are calculated for each of the seven pulp mills for a given year. The average of all the seven mills is added to provide the total average pulp produced per day for all mills (A). The total average kilograms of BOD released per day for all mills are also added together (B). This number (B) is then divided by the total average pulp produced per day (A) to arrive at the average kilograms of BOD released per air-dried tonne of pulp produced.

GOVERNMENT OF ALBERTA GREENHOUSE GAS EMISSION PROFILE

Greenhouse gas emissions are calculated by multiplying annual energy usage (e.g. cubic meters of natural gas and electricity directly tracked by Alberta Infrastructure or through estimates using information tracked by other departments, such as the number of government vehicles by an emissions factor) or an estimate is made based on government activities (i.e. kilometers traveled by employees in personal vehicles or waste levels). The results of the calculation are expressed in kilotonnes of CO_2 equivalent, the general standard for measuring greenhouse gas emissions. With the exception of electricity and waste, emission factors are based on Environment Canada data published through the National Voluntary Challenge and Registry Program (VCR Inc.).

ALBERTA ORGANIZATIONS ENERGY PRODUCTIVITY IMPROVEMENTS

Data is obtained as at October 31 of each year from VCR Inc., a non-profit partnership between industry and governments across Canada. Its mandate is to provide the means for promoting, assessing and recognizing the effectiveness of the voluntary approach in addressing climate change.

Only organizations that have head offices located in Alberta are included in this data.

GREENHOUSE GAS EMISSIONS INTENSITY INDICATOR

The Greenhouse Gas Emissions Intensity Indicator reflects greenhouse gas (GHG) emissions from Alberta sources as a function of the province's gross domestic product (GDP). GDP is measured in millions of constant (1997) dollars to ensure the numbers are comparable year to year. The measure uses the amount of GHG emissions (in millions of tonnes of CO_2 equivalent) divided by Alberta's GDP.

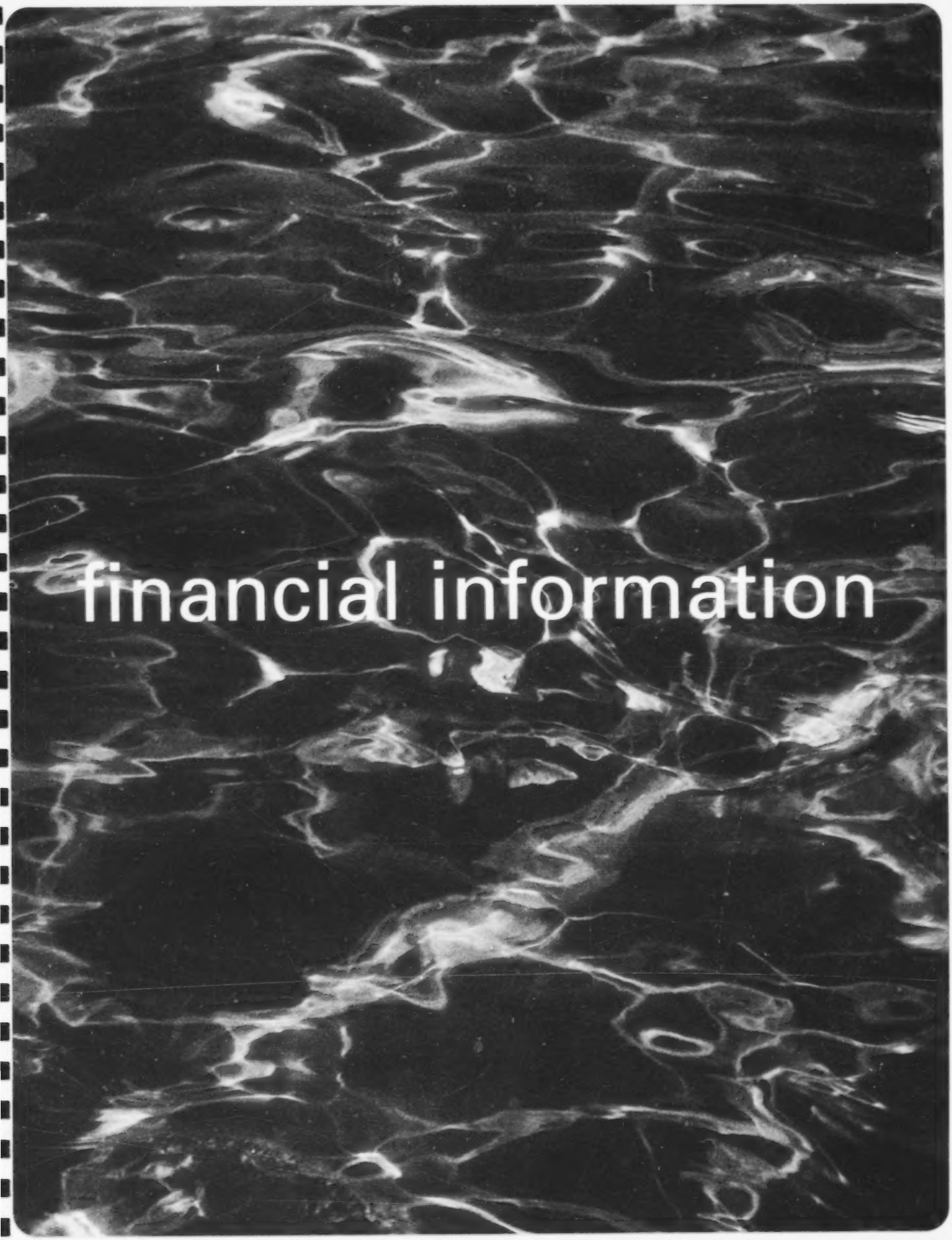
To arrive at the indicator, the value of emissions divided by GDP is then compared to a 1990 baseline intensity value (1990 = 100) to provide a relative measure of emissions intensity for the province.

CHANGES TO PERFORMANCE MEASURE INFORMATION

The Government of Alberta Greenhouse Gas Emission Profile and the Alberta Organizations Energy Productivity Improvements are discontinued after the 2003-2004 year. The new Greenhouse Gas Emissions Intensity Indicator replaces these two performance measures and aligns with the *Albertans & Climate Change: Taking Action* action plan released in October 2002.

The Amount of Biochemical Oxygen Demand Substances Discharged will no longer be reported annually, but approximately every three years, with the next results reported in 2006-2007. The continuous improvement trend has been consistent since 1991 and industry is performing well below the standard and the performance measure target.

There are four new performance measures and two name changes to existing performance measures in the Ministry of Environment's 2004-2007 Business Plan. The new performance measures include: Effective Infrastructure, Stakeholder Satisfaction with Ministry Programs, Water Use Efficiency and Productivity Indicator, and Energy Efficiency Conservation Indicator. These new performance measures will more effectively measure the ministry's goals. While not new, the Drinking Water Quality Indicator has been renamed the Drinking Water Safety Indicator, and the Surface Water Quality Index has been renamed the River Water Quality Index. These name changes more accurately reflect the performance measure content.


financial information

MINISTRY OF ENVIRONMENT

auditor's report on financial results

AUDITOR GENERAL *Alberta*

To the Members of the Legislative Assembly

I have audited the statement of financial position of the Ministry of Environment as at March 31, 2004 and the statements of operations and cash flow for the year then ended. These financial statements are the responsibility of the Ministry's management. My responsibility is to express an opinion on these financial statements based on my audit.

I conducted my audit in accordance with Canadian generally accepted auditing standards. Those standards require that I plan and perform an audit to obtain reasonable assurance whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation.

In my opinion, these financial statements present fairly, in all material respects, the financial position of the Ministry as at March 31, 2004 and the results of its operations and its cash flows for the year then ended in accordance with Canadian generally accepted accounting principles.

Fred J. Dunn

FCA
Auditor General

Edmonton, Alberta
May 21, 2004

MINISTRY OF ENVIRONMENT

statement of operations

Year ended March 31, 2004
(in thousands)

	2004		2003
	Budget (Schedule 4)	Actual	Actual
Revenues (Schedule 1)			
Internal Government Transfers	$ 5,975	$ 2,362	$ 2,929
Fees, Permits and Licences	2,318	1,693	1,970
Other Revenue	875	1,564	1,263
	9,168	5,619	6,162
Expenses – Directly Incurred (Note 2b and Schedule 8)			
Voted (Schedules 3 and 5)			
Environmental Leadership	14,402	15,198	13,062
Environmental Assurance	55,369	51,337	52,557
Environmental Stewardship	13,856	11,736	14,582
Hazard and Risk Management	6,882	7,000	2,141
Ministry Support Services	6,491	11,563	6,004
Amortization of Tangible Capital Assets	17,961	17,190	15,411
	114,961	114,024	103,757
Statutory (Notes 5 and 6, Schedules 3 and 5)			
Land Reclamation Program	3,850	1,194	907
Emergency Spills and Cleanups	1,525	981	1,311
Drought and Flood Emergencies	600	187	711
Valuation Adjustments			
Provision for Doubtful Accounts	–	–	8
Provision (Decrease) for Vacation Pay	99	215	(127)
Provision for Other	–	5,700	–
	6,074	8,277	2,810
	121,035	122,301	106,567
Loss (Gain) on Disposal of Tangible Capital Assets	68	(177)	161
Net Operating Results	$ (111,935)	$ (116,505)	$ (100,566)

The accompanying notes and schedules are part of these financial statements.

MINISTRY OF ENVIRONMENT

statement of financial position

March 31, 2004
(in thousands)

	2004	2003
ASSETS		
Cash	$ 490	$ 55
Accounts Receivable (Note 3)	1,096	1,178
Advances	5	4
Tangible Capital Assets (Note 4)	855,894	741,655
	$ 857,485	$ 742,892
LIABILITIES		
Accounts Payable and Accrued Liabilities (Note 5)	$ 20,340	$ 13,189
Unearned Revenue	690	984
	21,030	14,173
NET ASSETS		
Net Assets at Beginning of Year	728,719	695,683
Net Operating Results	(116,505)	(100,566)
Net Transfer from General Revenues	224,241	133,602
Net Assets at End of Year	836,455	728,719
	$ 857,485	$ 742,892

The accompanying notes and schedules are part of these financial statements.

statement of cash flow

Year ended March 31, 2004
(in thousands)

	2004	2003
Operating Transactions		
Net Operating Results	$ (116,505)	$ (100,566)
Non-cash Items Included in Net Operating Results		
Amortization	17,190	15,411
(Gain) Loss on Disposal of Tangible Capital Assets	(177)	161
Valuation Adjustments	5,915	(119)
	(93,577)	(85,113)
Decrease (Increase) in Accounts Receivable	82	(69)
Increase (Decrease) in Accounts Payable and Accrued Liabilities	1,236	(1,905)
Decrease in Unearned Revenue	(294)	(23)
Cash Applied to Operating Transactions	(92,553)	(87,110)
Capital Transactions		
Acquisition of Tangible Capital Assets	(850)	(407)
Disposal of Tangible Capital Assets	177	–
Transfer of Tangible Capital Assets to Other Government Entities	30	–
Transfer of Tangible Capital Assets from Other Government Entities	(130,609)	(46,084)
Cash Applied to Capital Transactions	(131,252)	(46,491)
Investing Transactions		
Decrease (Increase) in Advances	(1)	37
Cash Provided by (Applied to) Investing Transactions	(1)	37
Financing Transactions		
Net Transfer from General Revenues	224,241	133,602
Increase in Cash	435	38
Cash, Beginning of Year	55	17
Cash, End of Year	$ 490	$ 55

The accompanying notes and schedules are part of these financial statements.

notes to the financial statements

Year ended March 31, 2004 (in thousands)

NOTE 1
AUTHORITY AND PURPOSE

The Ministry of Environment operates under the authority of the *Government Organization Act*, Chapter G-10, Revised Statutes of Alberta 2000.

The purpose of the Ministry is to steward the use of and ensure the protection of our diverse environment to sustain natural ecosystems, healthy Albertans, strong communities and a prosperous economy.

NOTE 2
SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES AND REPORTING PRACTICES

The recommendations of the Public Sector Accounting Board of the Canadian Institute of Chartered Accountants are the primary source for the disclosed basis of accounting. Recommendations of the Accounting Standards Board of the Canadian Institute of Chartered Accountants, other authoritative pronouncements, accounting literature, and published financial statements relating to either the public sector or analogous situations in the private sector are used to supplement the recommendations of the Public Sector Accounting Board where it is considered appropriate. These financial statements are prepared in accordance with the following accounting policies that have been established by government for all departments.

(a) Reporting Entity

The reporting entity is the Ministry of Environment for which the Minister of Environment is accountable. All departments of the Government of Alberta operate within the General Revenue Fund (the Fund). The Fund is administered by the Minister of Finance. All cash receipts of departments are deposited into the Fund and all cash disbursements made by departments are paid from the Fund. Net transfer from General Revenues is the difference between all cash receipts and all cash disbursements made.

(b) Basis of Financial Reporting

Revenues

All revenues are reported on the accrual basis of accounting. Cash received for which goods or services have not been provided by year end is recorded as unearned revenue.

Internal Government Transfers

Internal government transfers are transfers between entities within the government reporting entity where the entity making the transfer does not receive any goods or services directly in return.

Dedicated Revenue

Dedicated revenue initiatives provide a basis for authorizing spending. Dedicated revenues are shown as credits or recoveries in the details of the Government Estimates for a supply vote. If actual dedicated revenues are less than budget and total voted expenses are not reduced by an amount sufficient to cover the deficiency in dedicated revenues, the following year's voted expenses are encumbered. If actual dedicated revenues exceed budget, the Ministry may, with the approval of the Treasury Board, use the excess revenue to fund additional expenses on the program. Schedule 2 discloses information on the Ministry's dedicated revenue initiatives.

notes to the financial statements Year ended March 31, 2004 (in thousands)

NOTE 2
SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES AND REPORTING PRACTICES – (CONT'D)

(b) Basis of Financial Reporting – (cont'd)

Expenses

Directly Incurred

Directly incurred expenses are those costs the Ministry has primary responsibility and accountability for, as reflected in the Government's budget documents.

In addition to program operating expenses such as salaries, supplies, etc., directly incurred expenses also include:

- amortization of tangible capital assets.
- pension costs which comprise the cost of employer contributions for current service of employees during the year.
- valuation adjustments which include changes in the valuation allowances used to reflect financial assets at their net recoverable or other appropriate value. Valuation adjustments also represent the change in management's estimate of future payments arising from obligations relating to vacation pay.

Incurred by Others

Services contributed by other entities in support of the Ministry operations are disclosed in Schedule 8.

Assets

Financial assets of the Ministry are limited to financial claims, such as advances to and receivables from other organizations, employees and other individuals.

Assets acquired by right are not included. Tangible capital assets of the Ministry are recorded at historical cost and amortized on a straight-line basis over the estimated useful lives of the assets. The threshold for capitalizing new systems development is $100 and the threshold for all other tangible capital assets is $15. All land is capitalized.

Liabilities

Liabilities represent all financial claims payable by the Ministry at fiscal year end.

Net Assets/Net Liabilities

Net assets/net liabilities represents the difference between the carrying value of assets held by the Ministry and its liabilities.

Valuation of Financial Assets and Liabilities

Fair value is the amount of consideration agreed upon in an arm's length transaction between knowledgeable, willing parties who are under no compulsion to act.

The fair values of accounts receivable, advances, and accounts payable and accrued liabilities are estimated to approximate their carrying values because of the short term nature of these instruments.

notes to the financial statements

Year ended March 31, 2004 (in thousands)

NOTE 3
ACCOUNTS RECEIVABLE

	2004			2003
	Gross Amount	Allowance for Doubtful Accounts	Net Realizable Value	Net Realizable Value
Accounts Receivable	$ 1,032	$ 5	$ 1,027	$ 1,158
Refunds from Suppliers	69	–	69	20
	$ 1,101	$ 5	$ 1,096	$ 1,178

Accounts receivable are unsecured and interest bearing.

NOTE 4
TANGIBLE CAPITAL ASSETS

		2004			2003
	Estimated Useful Life	Cost	Accumulated Amortization	Net Book Value	Net Book Value
General Capital Assets:					
Equipment*	3-10 years	$ 4,986	$ 4,445	$ 541	$ 676
Computer Hardware and Software	5-10 years	16,571	11,468	5,103	5,716
Infrastructure Assets:					
Land Improvements	40 years	17	2	15	15
Bridges	60 years	469	39	430	438
Dam and Water Management Structures**	25-80 years	1,073,394	223,589	849,805	734,810
		$ 1,095,437	$ 239,543	$ 855,894	$ 741,655

* Equipment includes vehicles, office, laboratory, heavy equipment and mobile equipment.

** Dams and water management structures include dams, reservoirs, weirs, canals, dykes, ditches, channels, diversions, cut-offs, pump houses and erosion protection structures.

notes to the financial statements

Year ended March 31, 2004 (in thousands)

NOTE 4
TANGIBLE CAPITAL ASSETS – (CONT'D)

Changes to tangible capital assets were as follows:

	2004	2003
Net Book Value at Beginning of Year	$ 741,655	$ 710,736
Purchase of Tangible Capital Assets	850	407
Net Book Value of Disposals and Write Downs	–	(161)
Transfer with Other Government Entities	130,579	46,084
Amortization of Tangible Capital Assets	(17,190)	(15,411)
Net Book Value at End of Year	$ 855,894	$ 741,655

NOTE 5
ACCOUNTS PAYABLE AND ACCRUED LIABILITIES

The Ministry has reached an agreement with the City of Calgary to reimburse costs associated with the clean up of storm waters that entered an irrigation canal. The Ministry will pay $5,700 over the next seven years. Five annual payments of $1,000 are due June 30, 2005 through 2009. A final payment of $700 is due June 30, 2010. The $5,700 balance is included in Accounts Payable and Accrued Liabilities as at March 31, 2004.

NOTE 6
TRANSFER OF SWAN HILLS WASTE TREATMENT PLANT

As a result of an agreement between the Ministers of Alberta Environment, Alberta Infrastructure and Alberta Sustainable Resource Development, the land and associated responsibilities of Swan Hills Waste Treatment Plant and related warehouse sites were transferred from the control of Alberta Environment and Alberta Sustainable Resource Development to Alberta Infrastructure. Comparatives for 2003 have been restated as if the Ministry had always been assigned its current responsibilities. Restatement of prior years as a result of this does not have any impact on net assets.

notes to the financial statements

Year ended March 31, 2004 (in thousands)

NOTE 7
COMMITMENTS

	2004	2003
Service Contracts (a)	$ 9,289	$ 11,703
Long-Term Leases (b)	1,833	953
Grants		
Waste Management Assistance Program	3,107	2,301
Animal and Human Health Scientific Study	–	192
Various Other Programs	100	360
	$ 14,329	$ 15,509

(a) The Ministry has a contractual obligation with the Piikani Nation of $567 annually until 2009, $800 in 2010, and $800 adjusted annually by the CPI index every year thereafter.

(b) The Ministry leases certain equipment under operating leases that expire on various dates to 2008. The aggregate amounts payable for the unexpired terms of these leases are as follows:

2005	$ 636
2006	567
2007	414
2008	216
Total	$ 1,833

NOTE 8
CONTINGENCIES

At March 31, 2004, the Ministry is a defendant in forty-one legal claims (2003 – forty-seven legal claims). Thirty-seven of these claims have specified amounts totaling $158,860 and the remaining four have no specified amount (2003 – forty-one claims with a specified amount of $764,298 and the remaining six with no specified amount). Included in the total legal claims are eight claims in which the Ministry has been named as the sole defendant (2003 – eight legal claims). Six of these claims have specified amounts totaling $5,306 and the remaining two claims have no specified amount (2003 – seven claims with a specified amount of $34,662 and the remaining claim has no specified amount). In addition, there are eight claims in which the Ministry has been jointly named with other entities (2003 – twelve legal claims). Six of these claims have specified amounts totaling $90,136 and the remaining two claims have no specified amount (2003 – seven claims with specified amounts totaling $91,435 and the remaining five claims with no specified amount). Twenty-five claims amounting to $63,418 are covered by the Alberta Risk Management Fund (2003 – twenty-seven claims with specified amounts totaling $638,201).

The resulting loss, if any, from these claims cannot be determined.

Certain contingent liabilities may exist for site remediation and reclamation which may be the responsibility of the Ministry. The potential costs relate to future site remediation works associated with various properties owned or acquired by the Province as a result of abandonment of contaminated properties. The preliminary estimate of the amount of such potential contingent liabilities is $7,494. Costs for site remediation and reclamation are recognized in the financial statements when work is undertaken.

notes to the financial statements

Year ended March 31, 2004 (in thousands)

NOTE 9
TRUST FUND UNDER ADMINISTRATION

The Ministry administers a trust fund that is a regulated fund consisting of public money over which the Legislature has no power of appropriation. Because the Province has no equity in the fund and administers it for the purpose of the trust, it is not included in the Ministry's financial statements.

At March 31, 2004, the trust fund under administration is as follows:

		2004		2003
Environmental Protection Security Fund	$	4,720	$	3,524
	$	4,720	$	3,524

In addition to the above trust fund under administration, the Ministry holds bank guarantees in the form of letters of credit and promissory notes in the amount of $363,572 (2003 – $349,513). The majority of these guarantees are held to assure satisfactory reclamation of coal and oil sands operations, sand and gravel pits, landfills, hazardous waste management, and hazardous recyclable facilities.

NOTE 10
DEFINED BENEFIT PLANS

The Ministry participates in the multi-employer pension plans, Management Employees Pension Plan and Public Service Pension Plan. The Ministry also participates in the multi-employer Supplementary Retirement Plan for Public Service Managers. The expense for these pension plans is equivalent to the annual contributions of $3,499 for the year ended March 31, 2004 (2003 – $2,566).

At December 31, 2003, the Management Employees Pension Plan reported a deficiency of $290,014 (2002 – $301,968) and the Public Service Pension Plan reported an actuarial deficiency of $596,213 (2002 – $175,528). At December 31, 2003, the Supplementary Retirement Plan for Public Service Managers had an actuarial surplus of $9,312 (2002 – $6,472).

The Ministry also participates in two multi-employer Long Term Disability Income Continuance Plans. At March 31, 2004, the Bargaining Unit Plan reported an actuarial deficiency of $9,766 (2003 – $14,434) and the Management, Opted Out and Excluded Plan an actuarial surplus of $1,298 (2003 – actuarial deficiency of $3,053). The expense for these two plans is limited to employer's annual contributions for the year.

NOTE 11
COMPARATIVE FIGURES

Certain 2003 figures have been reclassified to conform to the 2004 presentation.

NOTE 12
APPROVAL OF FINANCIAL STATEMENTS

The financial statements were approved by the Senior Financial Officer and the Deputy Minister.

revenues

SCHEDULE 1

Year ended March 31, 2004
(in thousands)

	2004		2003
	Budget	Actual	Actual
Internal Government Transfers			
Transfers from the Environmental Protection and Enhancement Fund	$ 5,975	$ 2,362	$ 2,929
Fees, Permits and Licences			
Land and Grazing	–	57	55
Other	2,318	1,636	1,915
	2,318	1,693	1,970
Other Revenue			
Refunds of Expenditure	–	219	470
Other	875	1,345	793
	875	1,564	1,263
	$ 9,168	$ 5,619	$ 6,162

MINISTRY OF ENVIRONMENT

dedicated revenue initiatives

SCHEDULE 2

Year ended March 31, 2004
(in thousands)

	2004		
	Authorized Dedicated Revenues	Actual Dedicated Revenues	(Shortfall)/ Excess
Water Management Infrastructure	$ 470	$ 776	$ 306
Information Sharing and Partnerships	100	–	(100)
	$ 570	$ 776	$ 206

The Water Management Infrastructure dedicated revenue initiative refers to the maintenance and upgrading of the provincial water management infrastructure system. Revenues are received through the Use of Works Agreements whereby developers pay an annual fee to the Province.

The Information Sharing and Partnerships dedicated revenue initiative refers to the development of technology based information management solutions to facilitate partnerships with Alberta industries.

Note: The dedicated revenue presented in this schedule is included in the Ministry's Statement of Operations.

MINISTRY OF ENVIRONMENT

expenses – directly incurred detailed by object

SCHEDULE 3

Year ended March 31, 2004
(in thousands)

	2004		2003
	Budget	Actual	Actual
Voted			
Salaries, Wages and Employee Benefits	$ 58,116	$ 54,926	$ 49,068
Supplies and Services	36,962	32,798	29,352
Grants	1,829	9,025	9,843
Financial Transactions and Other	93	85	83
Amortization of Tangible Capital Assets	17,961	17,190	15,411
	$ 114,961	$ 114,024	$ 103,757
Statutory			
Salaries, Wages and Employee Benefits	$ –	$ 8	$ 76
Supplies and Services	5,975	2,354	2,661
Grants	–	–	192
Valuation Adjustments			
Provision for Doubtful Accounts	–	–	8
Provision (Decrease) for Vacation Pay	99	215	(127)
Provision for Other	–	5,700	–
	$ 6,074	$ 8,277	$ 2,810

MINISTRY OF ENVIRONMENT

budget

SCHEDULE 4

Year ended March 31, 2004
(in thousands)

	2003-2004 Estimates	Adjustment	2003-2004 Budget	Authorized Supplementary	2003-2004 Authorized Budget
Revenues:					
Internal Government Transfers	$ 5,975	$ –	$ 5,975	$ –	$ 5,975
Fees, Permits and Licences	2,318	–	2,318	–	2,318
Other Revenue	875	–	875	–	875
	9,168	–	9,168	–	9,168
Expenses - Directly Incurred:					
Voted Operating Expenses					
Environmental Leadership	14,402	–	14,402	–	14,402
Environmental Assurance	55,369	–	55,369	–	55,369
Environmental Stewardship	13,856	–	13,856	–	13,856
Hazard and Risk Management	6,882	–	6,882	–	6,882
Ministry Support Services	6,491	–	6,491	–	6,491
Amortization of Tangible Capital Assets	17,961	–	17,961	–	17,961
	114,961	–	114,961	–	114,961
Statutory Expenses					
Land Reclamation Program	3,850	–	3,850	–	3,850
Emergency Spills and Cleanups	1,525	–	1,525	–	1,525
Drought and Flood Emergencies	600	–	600	–	600
Valuation Adjustments					
Provision for Vacation Pay	99	–	99	–	99
	6,074	–	6,074	–	6,074
	121,035	–	121,035	–	121,035
Loss (Gain) on Disposal of Tangible Capital Assets	68	–	68	–	68
Net Operating Results	$ (111,935)	$ –	$ (111,935)	$ –	$ (111,935)
Equipment/Inventory Purchases	$ 685	$ –	$ 685	$ –	$ 685

MINISTRY OF ENVIRONMENT

comparison of expenses – directly incurred, equipment/inventory purchases and statutory expenses by element to authorized budget

SCHEDULE 5

Year ended March 31, 2004
(in thousands)

	2003-2004 Estimates	Adjustment	2003-2004 Budget	Authorized Supplementary	2003-2004 Authorized Budget	2003-2004 Actual	Unexpended (Over Expended)
Voted Expenses and Equipment/Inventory Purchases							
Ministry Support Services							
1.0.1 Minister's Office	$ 359	$ –	$ 359	$ –	$ 359	$ 359	$ –
1.0.2 Deputy Minister's Office	374	–	374	–	374	374	–
1.0.3 Communications	766	–	766	–	766	632	134
1.0.4 Corporate Services							
Operating Expense	4,992	–	4,992		4,992	10,198	(5,206)
Equipment/ Inventory Purchases	–	–	–	–	–	30	(30)
1.0.5 Amortization of Tangible Capital Assets	105	–	105	–	105	12	93
Total Program 1	6,596	–	6,596	–	6,596	11,605	(5,009)
Environmental Protection Operating Expense							
2.1 Environmental Leadership							
2.1.1 Proactive Environmental Protection	14,402	–	14,402	–	14,402	15,198	(796)
Total Sub-Program	14,402	–	14,402	–	14,402	15,198	(796)
2.2 Environmental Assurance							
2.2.1 Environmental Rules and Regulations							
Operating Expense	55,369	–	55,369	–	55,369	51,337	4,032
Equipment/ Inventory Purchases	280	–	280	–	280	530	(250)
Total Sub-Program	55,649	–	55,649	–	55,649	51,867	3,782
2.3 Environmental Stewardship							
2.3.1 Partnerships for Environmental Protection	6,366	–	6,366	–	6,366	4,936	1,430
2.3.2 Environmental Education and Information							
Operating Expense	7,490	–	7,490	–	7,490	6,800	690
Equipment/ Inventory Purchases	405	–	405	–	405	290	115
Total Sub-Program	14,261	–	14,261	–	14,261	12,026	2,235

MINISTRY OF ENVIRONMENT

comparison of expenses – directly incurred, equipment/inventory purchases and statutory expenses by element to authorized budget

SCHEDULE 5 – (CONT'D)

Year ended March 31, 2004
(in thousands)

	2003-2004 Estimates	Adjustment	2003-2004 Budget	Authorized Supplementary	2003-2004 Authorized Budget	2003-2004 Actual	Unexpended (Over Expended)
Voted Expenses and Equipment/Inventory Purchases – (cont'd)							
Environmental Protection Operating Expense – (cont'd)							
2.4 Hazard and Risk Management							
2.4.1 Environmental Protection Emergencies	6,882	–	6,882	–	6,882	7,000	(118)
Total Sub-Program	6,882	–	6,882	–	6,882	7,000	(118)
2.5 Non-Cash Transactions							
2.5.1 Amortization of Tangible Capital Assets	17,856	–	17,856	–	17,856	17,178	678
Total Sub-Progam	17,856	–	17,856	–	17,856	17,178	678
Total Program 2	109,050	–	109,050	–	109,050	103,269	5,781
	$ 115,646	$ –	$ 115,646	$ –	$ 115,646	$ 114,874	$ 772
Program Operating Expense	$ 114,961	$ –	$ 114,961	$ –	$ 114,961	$ 114,024	$ 937
Program Equipment/ Inventory Purchases	685	–	685	–	685	850	(165)
	$ 115,646	$ –	$ 115,646	$ –	$ 115,646	$ 114,874	$ 772
Statutory Expenses							
Land Reclamation Program	$ 3,850	$ –	$ 3,850	$ –	$ 3,850	$ 1,194	$ 2,656
Emergency Spills and Cleanups	1,525	–	1,525	–	1,525	981	544
Drought and Flood Emergencies	600	–	600	–	600	187	413
Valuation Adjustments and Other Provisions	99	–	99	–	99	5,915	(5,816)
	$ 6,074	$ –	$ 6,074	$ –	$ 6,074	$ 8,277	$ (2,203)

MINISTRY OF ENVIRONMENT

salary and benefits disclosure

SCHEDULE 6

Year ended March 31, 2004

	2004				2003
	Base Salary[1]	Other Cash Benefits[2]	Other Non-cash Benefits[3]	Total	Total
Deputy Minister[4]	$ 163,152	$ 31,857	$ 42,485	$ 237,494	$ 237,614
Assistant Deputy Ministers					
Environmental Assurance Division	122,712	17,970	30,989	171,671	163,516
Regional Services Division	128,364	25,237	31,033	184,634	180,530
Strategic Directions Division	125,904	16,600	28,501	171,005	176,431
Strategic Corporate Services Division[5]	11,879	–	3,488	15,367	165,231
Executive Director, Corporate Services Division[6]	97,080	16,100	25,210	138,390	–
Director, Human Resource Services	89,556	9,900	24,842	124,298	109,459

(1) Base salary includes regular base pay.
(2) Other cash benefits include bonuses, vacation payouts, overtime and lump sum payments.
(3) Other non-cash benefits include government's share of all employee benefits and contribution or payments made on behalf of employees including pension, health care, dental coverage, group life insurance, short and long term disability plans, WCB premiums, professional memberships, and tuition fees.
(4) Automobile provided, no dollar amount included in benefits and allowances.
(5) The Assistant Deputy Minister of Strategic Corporate Services position was terminated in June of 2003. The incumbent's services were shared with the Ministry of Sustainable Resource Development which contributes its own share of the cost of salary and benefits. For 2004, only Environment's portion of salary and benefits are disclosed in this schedule.
(6) The Executive Director position of Corporate Services was created and filled in June of 2003.

related party transactions

SCHEDULE 7

Year ended March 31, 2004
(in thousands)

Related parties are those entities consolidated or accounted for on a modified equity basis in the Province of Alberta's financial statements. Related parties also include management in the Ministry.

The Ministry and its employees paid or collected certain taxes and fees set by regulation for permits, licences and other charges. These amounts were incurred in the normal course of business, reflect charges applicable to all users, and have been excluded from this Schedule.

The Ministry had the following transactions with related parties recorded on the Statement of Operations and the Statement of Financial Position at the amount of consideration agreed upon between the related parties:

	Other Entities	
	2004	2003
Revenue		
Internal Government Transfers	$ 2,362	$ 2,929
	$ 2,362	$ 2,929
Expenses – Directly Incurred		
Other Services	$ 5,781	$ 4,858
	$ 5,781	$ 4,858
Tangible Capital Assets Transferred	$ 130,579	$ 46,084
Receivable from	$ 733	$ 878
Payable to	$ –	$ 307

The Ministry also had the following transactions with related parties for which no consideration was exchanged. The amounts for these related party transactions are estimated based on the costs incurred by the service provider to provide the service. These amounts are not recorded in the financial statements but are disclosed in Schedule 8.

	Other Entities	
	2004	2003
Expenses – Incurred by Others		
Accommodation	$ 4,591	$ 4,587
Legal	1,780	2,028
Roads/Bridges Maintenance	4,939	4,320
	$ 11,310	$ 10,935

MINISTRY OF ENVIRONMENT

allocated costs

SCHEDULE 8

Year ended March 31, 2004
(in thousands)

	2004							2003
		Expenses – Incurred by Others			Valuation Adjustments [4]			
Program	Expenses[1]	Accommodation Costs[2]	Legal Services[3]	Roads/Bridges Maintenance	Vacation Pay	Other	Expenses	Expenses
Environmental Leadership	$ 15,198	$ 506	$ 196	$ –	$ 64	$ –	$ 15,964	$ 13,637
Environmental Assurance	51,337	2,982	1,513	4,939	139	5,700	66,610	61,810
Environmental Stewardship	11,736	456	–	–	(4)	–	12,188	14,958
Hazard and Risk Management	7,000	258	–	–	(21)	–	7,237	2,381
Ministry Support Services	11,563	389	71	–	37	–	12,060	6,376
Amortization of Tangible Capital Assets	17,190	–	–	–	–	–	17,190	15,411
Land Reclamation Program	1,194	–	–	–	–	–	1,194	907
Emergency Spills and Cleanups	981	–	–	–	–	–	981	1,311
Drought and Flood Emergencies	187	–	–	–	–	–	187	711
	$ 116,386	$ 4,591	$ 1,780	$ 4,939	$ 215	$ 5,700	$ 133,611	$ 117,502

(1) Expenses – Directly Incurred as per Statement of Operations, excluding valuation adjustments.
(2) Costs shown for Accommodation (includes grants in lieu of taxes) on Schedule 7, allocated by budgeted Full-Time Equivalent Employment.
(3) Costs shown for Legal Services on Schedule 7, allocated by estimated costs incurred by each program.
(4) Valuation Adjustments as per Statement of Operations. Vacation Pay is allocated by employee.

alphabetical list of government entities' financial statements

ENTITIES NOT INCLUDED IN THE CONSOLIDATED GOVERNMENT REPORTING ENTITY

Ministry, Department, Fund or Agency – Ministry Annual Report

- Agriculture Financial Services Corporation[1] – Agriculture, Food and Rural Development
- Alberta Alcohol and Drug Abuse Commission – Health and Wellness
- Alberta Capital Finance Authority – Finance
- Alberta Dairy Control Board[2] – Agriculture, Food and Rural Development
- Alberta Energy and Utilities Board – Energy
- Alberta Gaming and Liquor Commission – Gaming
- Alberta Government Telephones Commission – Finance
- Alberta Heritage Foundation for Medical Research Endowment Fund – Revenue
- Alberta Heritage Savings Trust Fund – Revenue
- Alberta Heritage Scholarship Fund – Revenue
- Alberta Heritage Science and Engineering Research Endowment Fund – Revenue
- Alberta Historical Resources Foundation – Community Development
- Alberta Insurance Council – Finance
- Alberta Pensions Administration Corporation – Finance
- Alberta Petroleum Marketing Commission – Energy
- Alberta Research Council Inc. – Innovation and Science
- Alberta Risk Management Fund – Revenue
- Alberta School Foundation Fund – Learning
- Alberta Science and Research Authority – Innovation and Science
- Alberta Securities Commission – Revenue
- Alberta Social Housing Corporation – Seniors
- Alberta Sport, Recreation, Parks and Wildlife Foundation – Community Development
- Alberta Treasury Branches – Finance
- ATB Investment Services Inc. – Finance
- Child and Family Services Authorities – Children's Services
  - Calgary and Area Child and Family Services Authority
  - Central Alberta Child and Family Services Authority
  - East Central Alberta Child and Family Services Authority
  - Edmonton and Area Child and Family Services Authority
  - North Central Alberta Child and Family Services Authority
  - Northeast Alberta Child and Family Services Authority
  - Northwest Alberta Child and Family Services Authority
  - Southeast Alberta Child and Family Services Authority
  - Southwest Alberta Child and Family Services Authority
  - Metis Settlements Child and Family Services Authority
- Credit Union Deposit Guarantee Corporation – Finance
- Crop Reinsurance Fund of Alberta[1] – Agriculture, Food and Rural Development
- Department of Agriculture, Food and Rural Development – Agriculture, Food and Rural Development
- Department of Children's Services – Children's Services
- Department of Community Development – Community Development
- Department of Energy – Energy
- Department of Finance – Finance
- Department of Gaming – Gaming
- Department of Health and Wellness – Health and Wellness
- Department of Innovation and Science – Innovation and Science
- Department of Learning – Learning
- Department of Revenue – Revenue

alphabetical list of government entities' financial statements

- Department of Seniors – Seniors
- Department of Solicitor General – Solicitor General
- Department of Sustainable Resource Development – Sustainable Resource Development
- Environmental Protection and Enhancement Fund – Sustainable Resource Development
- Gainers Inc. – Finance
- Government House Foundation – Community Development
- Historic Resources Fund – Community Development
- Human Rights, Citizenship and Multiculturalism Education Fund – Community Development
- iCORE Inc. – Innovation and Science
- Lottery Fund – Gaming
- Ministry of Aboriginal Affairs and Northern Development[3] – Aboriginal Affairs and Northern Development
- Ministry of Agriculture, Food and Rural Development – Agriculture, Food and Rural Development
- Ministry of Children's Services – Children's Services
- Ministry of Community Development – Community Development
- Ministry of Economic Development[3] – Economic Development
- Ministry of Energy – Energy
- Ministry of Environment[3] – Environment
- Ministry of Finance – Finance
- Ministry of Executive Council[3] – Executive Council
- Ministry of Gaming – Gaming
- Ministry of Government Services[3] – Government Services
- Ministry of Health and Wellness – Health and Wellness
- Ministry of Human Resources and Employment[3] – Human Resources and Employment
- Ministry of Infrastructure[3] – Infrastructure
- Ministry of Innovation and Science – Innovation and Science
- Ministry of International and Intergovernmental Relations[3] – International and Intergovernmental Relations
- Ministry of Justice[3] – Justice
- Ministry of Learning – Learning
- Ministry of Municipal Affairs[3] – Municipal Affairs
- Ministry of Revenue – Revenue
- Ministry of Seniors – Seniors
- Ministry of Solicitor General – Solicitor General
- Ministry of Sustainable Resource Development – Sustainable Resource Development
- Ministry of Transportation[3] – Transportation
- N.A. Properties (1994) Ltd. – Finance
- Natural Resources Conservation Board – Sustainable Resource Development
- Persons with Developmental Disabilities Boards – Community Development
  - Calgary Region Community Board
  - Central Region Community Board
  - Edmonton Region Community Board
  - Northeast Region Community Board
  - Northwest Region Community Board
  - Provincial Board
  - South Region Community Board
- Provincial Judges and Masters in Chambers Reserve Fund – Finance
- Supplementary Retirement Plan Reserve Fund – Finance
- Victims of Crime Fund – Solicitor General
- Wild Rose Foundation – Community Development

1 *The Crop Reinsurance Fund of Alberta was merged into the Agriculture Financial Services Corporation, effective April 1, 2003.*

2 *Dissolved August 1, 2003*

3 *Ministry includes only the departments so separate department financial statements are not necessary.*

MINISTRY OF ENVIRONMENT

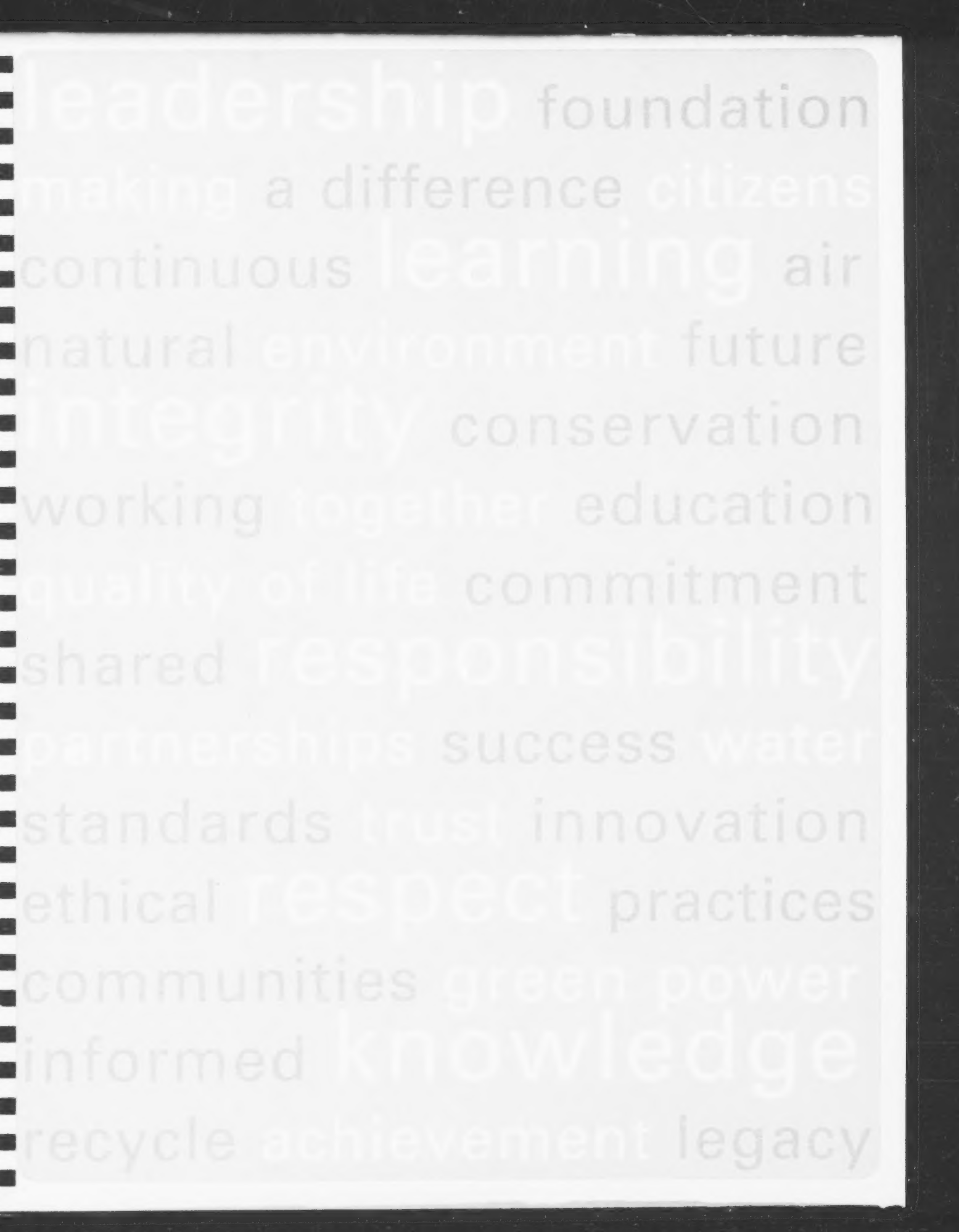
alphabetical list of government entities' financial statements

ENTITIES NOT INCLUDED IN THE CONSOLIDATED GOVERNMENT REPORTING ENTITY

Fund or Agency – Ministry Annual Report

- Alberta Cancer Board – Health and Wellness
- Alberta Foundation for Health Research – Innovation and Science
- Alberta Heritage Foundation for Medical Research – Innovation and Science
- Alberta Heritage Foundation for Science and Engineering Research – Innovation and Science
- Alberta Mental Health Board – Health and Wellness
- Alberta Teachers' Retirement Fund Board – Learning
- Improvement Districts' Trust Account – Municipal Affairs
- Local Authorities Pension Plan – Finance
- Long-Term Disability Income Continuance Plan Bargaining Unit – Human Resources and Employment
- Long-Term Disability Income Continuance Plan Management, Opted Out and Excluded – Human Resources and Employment
- Management Employees Pension Plan – Finance
- Provincial Judges and Masters in Chambers Pension Plan – Finance
- Public Post Secondary Institutions – Learning
- Public Service Management (Closed Membership) Pension Plan – Finance
- Public Service Pension Plan – Finance
- Regional Health Authorities – Health and Wellness
- School Boards – Learning
- Special Areas Trust Account – Municipal Affairs
- Special Forces Pension Plan – Finance
- Supplementary Retirement Plan for Provincial Judges and Masters in Chambers – Finance
- Supplementary Retirement Plan for Public Service Managers – Finance
- Workers' Compensation Board – Human Resources and Employment

future


leadership
foundation
making a difference
citizens
continuous learning
air
natural environment
future
integrity
conservation
working together
education
quality of life
commitment
shared responsibility
partnerships
success
water
standards
trust
innovation
ethical
respect
practices
communities
green power
informed
knowledge
recycle
achievement
legacy

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